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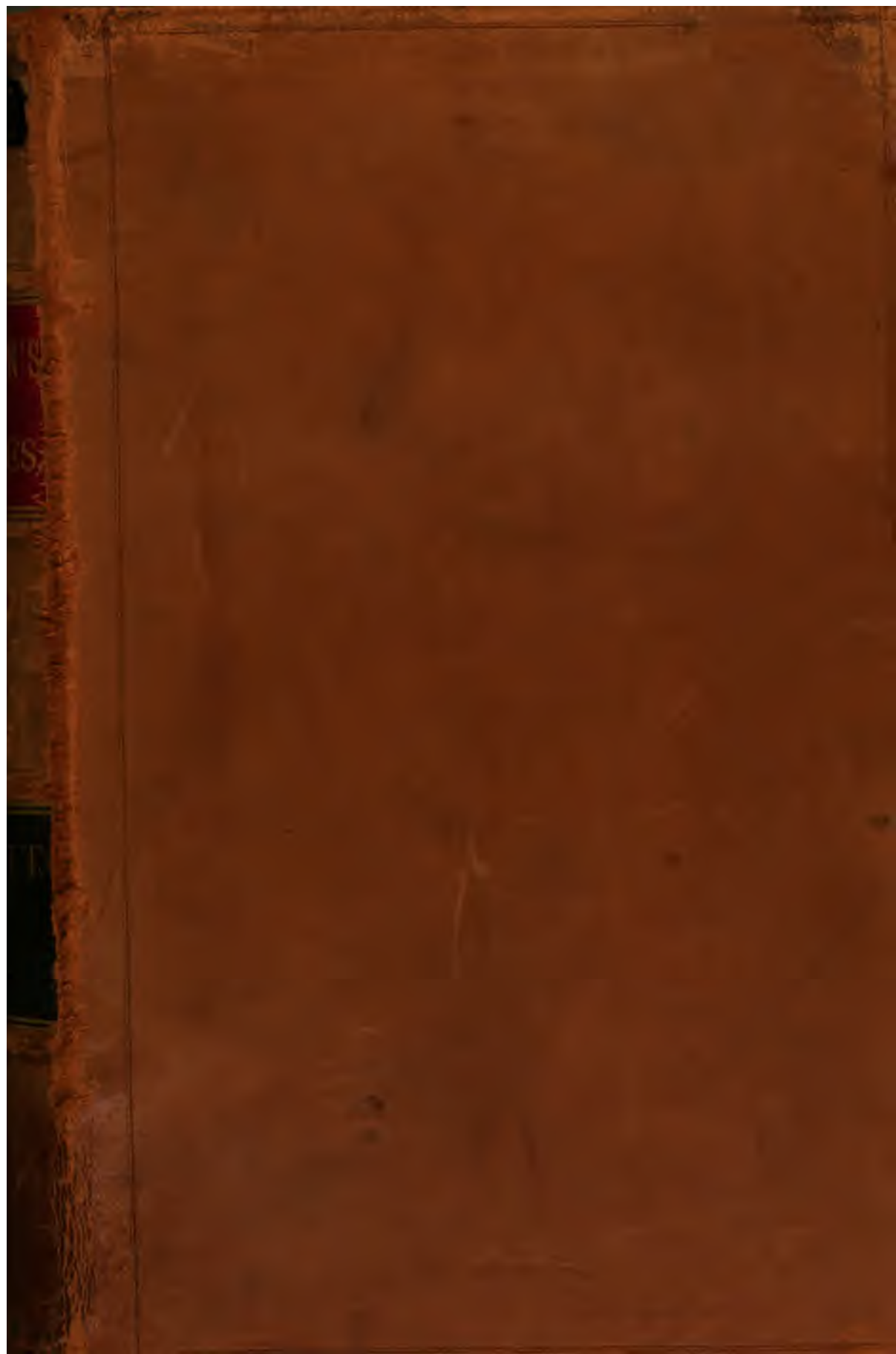
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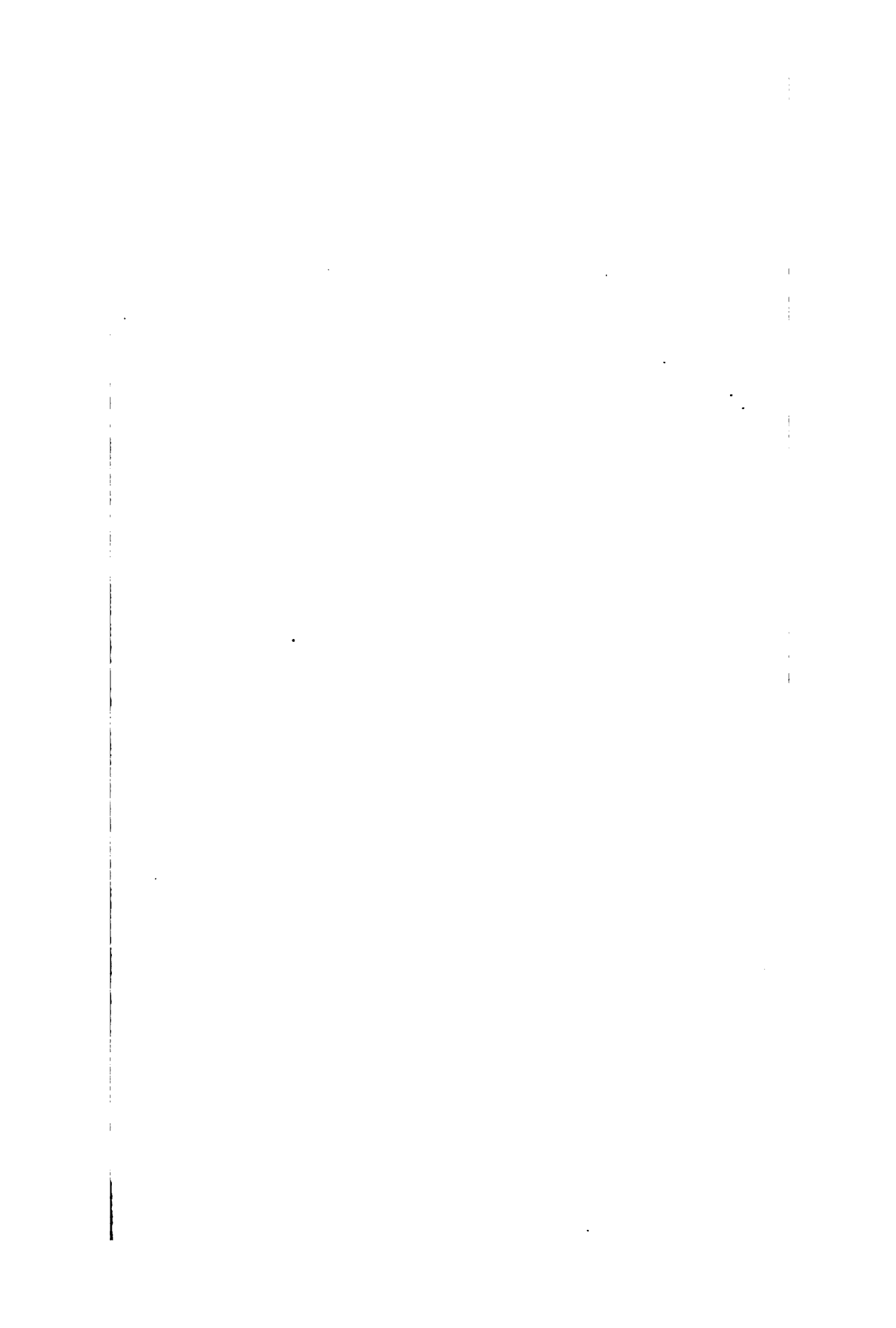
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REPORTS
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DECIDED IN THE
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Henry Adams

PATENT CAUSES

DECIDED

—IN THE—

CIRCUIT COURTS OF THE UNITED STATES.

HENRY A. ADAMS

vs.

THE JOLIET MANUFACTURING COMPANY. IN EQUITY.

The complainant's invention consisted in reversing the motion of the beater-bars for regulating the feed in a corn-sheller, and by this change produced a result which had not before been attained: *Held*, that the invention was patentable.

The courts should not defeat a patent for a mere technical defect in description, if it clearly appears what the inventor has described and claimed as his invention.

A change of location of a part, in combination, where there is no new function performed by the changed member in its new location, will not evade a patent. Nor will the fact that the part changed works better in the location where the defendant puts it, than where complainant put it, if it does the same work, but only in degree better, make any difference. The result is the same.

Letters Patent No. 132,128, granted to Henry A. Adams, October 15th, 1872, for improvement in corn-shellors, held valid.

(Before BLODGETT, J., Northern District of Illinois, June, 1877.)

BLODGETT, J.

This is a bill in equity for an alleged infringement of letters patent of the United States issued to Henry A. Adams, dated

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October 15th, 1872, for an "improvement in corn-shellers," and prays an account of damages, and injunction.

The complainant's improvement consists in the arrangement of a winged shaft, or "*beater-shaft*," so geared as to revolve rapidly in the throat of the corn-sheller, for the purpose of driving the ears of corn into the machine. In his specifications his device is described as follows: "This invention relates to an improvement in a corn-sheller patented by Augustus Adams, as described in his letters patent No. 54,659, dated May 15th, 1866.

"In said patented corn-sheller a winged shaft is placed above the opening in the sheller, and is worked oppositely to the direction of the entering corn in such manner that the said wings strike the upper ear if two ears attempt to enter the throat at once, and throw said upper ear back into position to descend properly, but I have discovered that the ear so thrown back retards the feed, inasmuch as the following ears are likely to override the ears so thrown back, and the difficulty is thus continued. In the present invention, I propose to overcome this objection by forcing all the ears, as they approach the throat, to pass rapidly out of the way into the sheller, by means presently specified. And to this end I arrange a shaft above the throat with a series of wings, wheels or projections, to revolve in the same direction as the entering corn, so as to force the corn rapidly forward into the sheller, which is capable of shelling all the corn that can be forced through the throat. By this means I avoid any chance of clogging the feed under ordinary circumstances."

His detailed description of his device is as follows: "H is a shaft, which may be surrounded by the hood R. This shaft carries the beaters or wings P, arranged to revolve in the direction of the arrows (that is, the direction of the feed shown at Fig. 1 of the drawing. Space enough is left between the revolving wings and the bottom of the throats B to allow of a single ear, as at *n*, to pass freely beneath without contact, but sufficiently near to strike an overriding ear, as at *m*, and force it and other ears in contact therewith, or in the road thereof, ahead rapidly into the sheller, clearing the passage for the corn following."

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His first claim is as follows : " The combination, with a corn-sheller, of a series of wings, wheels, or projections, so arranged on a shaft as to revolve in the same direction the corn is running, and so placed relative to the throats as to force into the machine all misplaced or hesitating ears, substantially as specified."

It may be premised that the device in question is applicable to a power-sheller only, and is intended to operate in connection with the endless apron or other feeding device, whereby the ears of corn are brought to the throat of the sheller, and the object was to keep the throat of the machine from clogging by forcing the ears into the throat of the machine, instead of allowing them to pile up or override each other at that point. The object was to secure an operative automatic feed, which, without the care of an attendant, would keep the stream of ears of corn steadily and uniformly running into the sheller, instead of permitting it to pile up or choke in the throat.

Augustus Adams had two devices in his machine prior to complainant's invention, intended to accomplish the same purpose. The first were the small picker-wheels, running in the same plane with the shelling-disks, and intended to catch and carry forward the ears as they fell into the throat. The second was a winged shaft, or beater-bar, over the throat of the sheller, so arranged as to revolve in a direction contrary to the direction of the stream of ears of corn, and drive back the overriding ears as they approached the throat. This device was found to do but little toward securing the desired result, as the ears thrust or knocked back only got in the way of others, and the machine was, therefore, still liable to clog, so as to make the feed irregular, and require frequent attention from an attendant.

At this stage of the art the complainant entered the field, and although he only reversed the motion of the Augustus Adams beater-bars, yet the evidence shows he produced, by this comparatively trifling change, a result, so far as the automatic feed of a corn-sheller was concerned, which had not been attained before.

The defence, first, denies the novelty of the invention second, denies the infringement.

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Upon the question of novelty, evidence has been put into the record of a large number of devices for feeding or regulating the feed of corn-shellers, thrashing-machines, straw-cutters, planing-machines, carding-machines, etc. But I do not find in any of them anything which seems to anticipate the complainant's machine. The device of Augustus Adams in form of construction is almost precisely like that of complainant's, except that it revolves in a contrary direction. But when at rest, and without the gearing by which the motion is secured, the two devices would strike the eye as substantially alike. Defendant also insists that the first claim of complainant's patent is anticipated by the picker-wheels, as they are called, in Augustus Adams' patent; because complainant's claim is for "*a series of wings, wheels, or projections, so arranged on a shaft as to revolve in the same direction the corn is running.*" * * * And it is argued that the claim to use "*wheels*" on the shaft, necessarily involves the use of wheels revolving *over* the throat of the sheller, as the picker-wheels revolve *in* the throat. It may be admitted that the terms used are somewhat unfortunate, and may tend to confuse, but the court should never defeat a patent for a mere technical defect, if it clearly appears what the inventor has described, and claimed as his invention. It seems to me the word wheels is used in this claim as a synonym for disks. The idea of the person who drew the claim, it appears to me, was that the wings or beaters might have disks on each side to help in thrusting the corn forward when they were used. I think, also, the court might, if necessary to save the patent, reject this word as surplusage, although I do not think it necessary to do so in this case, as the patentee in his specification evidently intends to suggest that some kind of wheels or disks may be fixed upon the shaft to act with the beaters; but this is more in the nature of a suggestion than a specific device by which he is bound to construct his machine.

The principle that it is the duty of the court to uphold and sustain the patent, instead of seeking for reasons to overthrow it, is fully sustained. *Turrill v. Michigan Southern R. R. Co.*, 1 Wall., 491; *Rubber Company v. Goodyear*, 9 Wall., 788; *Klein v. Russell*, 19 Wall., 433; *Burden v. Corning*, 2 Fish., 477. I

do not, therefore, find the complainant's invention anticipated by the picker-wheels of Augustus Adams, nor does it seem to me the first claim of the patent should be held void for the use of the word "*wheels*."

As to the infringement: The proof shows that defendant makes and sells a machine—complainant's Exhibit C—with a beater-bar revolving at the entrance to the throat of the machine, so as to strike the ears of corn on the under side instead of the top, and so force them into the sheller. And it is claimed by defendant that the function performed by its beater-bar is different from that performed by complainant's. Defendant calls its beater-bar a device for *forcing* the feed, while complainant's is only a *regulator* or device for disposing of the misplaced or overriding ears. The models of both complainant's and defendant's shellers show that the ears of corn are brought forward nearly above the throat of the sheller upon an endless apron, and from that dropped or slid down a sharp, almost perpendicular incline, into the throat of the shelling apparatus. It may, I think, be therefore said, that no device for forcing the feed is required in either machine, but what both need is a regulator to prevent the ears from overriding each other and choking up the throat; and it is very plain to me that the defendant's beaters, under the stream of ears of corn, perform the same office, and no other that is performed by complainant's.

A change of location of a part, in a combination where there is no new function performed by the changed member in its new location, will not evade a patent. In the case of *Potter v. Schenck*, before his honor, Judge Drummond, 1 Biss., 515, an infringement was alleged of the Wilson patent for a sewing-machine feed. By the defendant's device in that case the feed was secured by the pressure of teeth operating upon the top instead of the under side of the cloth, and in reference to this change of mode in effecting the result, the learned judge said:

"The question is, whether this is a substantial variation in all or any of its particulars, from the invention of Wilson as described in his specifications of 1856. I have already stated that it is not, and, as it seems to me, on this ground, viz.:

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that when a mechanic has the leading idea which is developed in Wilson's patent, once thoroughly understood and fixed in his mind, he can carry out that idea in a variety of forms, simply by the exercise of mechanical ingenuity. Here was a great leading principle in the feed of the machine, devised and invented by Wilson. He, to be sure, describes the particular manner in which he carries out that idea ; but once get that in the mind and it is clear that you can carry it out in a variety of forms. This is, it may be said, an ingenious variation or difference by which the idea of Wilson is carried out."

"The shoe or main part of the feeding apparatus, is not placed beneath the plate upon which the cloth rests, but is on the top of the plate, or, as was contended and I think with a good deal of force, by the counsel for complainants, instead of being placed as Wilson describes it, it was merely reversed. It is clear that that does not change the principle of the invention, and it is clear, too, as already stated, that a mechanic once having the idea in his mind could apply it by adopting a great variety of forms and devices, and this among others."

Nor will the fact that the beater does its work even better in the location where defendant puts it than where complainant puts it, if it does the same work, but only in degree better, make any difference. The result is still the same. The ears are urged into this sheller by the blows they get from these revolving wings, whether they receive them on the top or bottom. And it can make no difference, it seems to me, that defendant's beaters may strike every ear, while complainant's strike only the overriding ones, because, when the stream is running evenly, no blows are needed on either side, and when one ear comes along with another on top of it, it makes no difference whether the under one or upper one is first driven forward into the sheller, so long as that is the function of the beater ; whether it strikes the top or bottom, the result is the same, and secured by substantially the same mechanism. Both these machines *force* the feed by driving the corn into the sheller and preventing clogging, and both of them *regulate* it. It, therefore, seems to me that neither of the points made in the answer is sufficient to defeat the patent ; that,

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as the proof in this case stands, the patent is for a novel and useful invention, and that the defendant by its machine infringes the patent.

Coburn & Thatcher, for the complainant.

Mundy & Evarts, for the defendant.

HUGH GRAHAM

vs.

ELIJAH J. GAMMON ET AL. IN EQUITY.

It is a well-settled principle of patent law, that the mere suggestion that a given result may be obtained, is not patentable, and does not anticipate a patent by another, but a mechanism or device must be described by which the suggested result is obtained.

Where a patent is for mechanism by which a particular result is produced, a prior patent, in order to anticipate it, must contain more than a mere statement that the result may be accomplished; it must contain a description of the mechanism by which it is accomplished.

The invention claimed in the first and second claims of Letters Patent No. 74,342, granted to Alvaro B. Graham, February 11th, 1868, for a device for rocking or rolling the sickle-bar or finger-beam of a harvester, is novel, and is not anticipated by the patents granted to Dolph, Zug, Ball, Bartlett and Dodge, or Wemple.

The vibratable link in the Sprague mower is an infringement on the Graham patent, as it is an equivalent mode of producing the same result.

(Before BLODGETT, J., Northern District of Illinois, July, 1877.)

This is a suit in equity for the infringement of a patent granted by the United States to Alvaro B. Graham, dated February 11th, 1868, for an improvement in harvesters.

The bill alleges that the complainant is the assignee of the patentee, and charges the defendants with infringement. The defendants in their answer deny, first, the novelty of

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the invention ; and secondly, the infringement of the patent.

BLODGETT, J.

This patent contains eleven distinct claims, but the controversy in the case is confined to the first two claims.

The feature of the machine covered by the two claims in controversy, is the device for rocking or rolling the sickle-bar, or finger-beam, as it is called by the patentee. This finger-beam is so arranged that it may be rocked or tipped upward or downward so as to incline the teeth or fingers up or down, so that it may be passed over a stone or down into a hollow.

This is accomplished by joining the sickle-bar, or finger-beam, as it is called, to what the patentee calls a vibratable link, which is a link extending from the finger-bar backward to a bracket which is fastened to the frame of the machine, so that the finger-beam may be raised or lowered, and through its connection with this vibratable link it can be regulated, or tilted either up or down, the tilting being accomplished by means of the vertical arm which extends up from the vibratable link, and a lever attached to the top of the arm, reaching forward to a point convenient to the seat of the driver, so that the driver readily works or controls the rocking movement, as occasion requires. The mechanism by which the rocking movement is produced, consists of a swivel-joint M, at the point where the vibratable link is attached to the bracket, and the swivel-joint N, which connects the vibratable link with the draught-rod, so that the cutting mechanism is drawn or impelled forward by this draught-rod, connected as it is by the swivel to the link, thereby permitting the motions that are required for the purpose of the action of the finger-bar, without interfering with the rocking or rolling motion. There are also other devices in the machine, intended to raise or lower the sickle-bar, but those are not in controversy. The machine which is shown in the drawings by the patentee in this case is known to farmers and manufacturers as a rear-cut machine, but the patentee provides in his specification, or suggests, that the device is equally applicable

to a forward cut, where the cutting apparatus is forward of the axle and wheel, and to accomplish this change he suggests that the draught-rod would become a push-rod, and would become subject to a pushing strain or force, instead of a tensile or drawing strain.

The claims under consideration and in controversy in this case, are as follows : " The combination, as set forth, in a harvester, of the finger-beam with the gearing carriage, by means of the vibratable link, the draught-rod, and swivel-joints M and N', so that the finger-beam may both rise and fall at either end and rock forward or backward."

Second : " The combination, as set forth, in a harvester, of the finger-beam, gearing carriage, vibratable link, draught-rod, swivel-joints, and arm by which the rocking of the finger-beam is controlled."

This last claim is, in one sense, a repetition of the other, that is, he claims the whole of this mechanism in combination.

The defendants insist that the idea of rocking the finger-beam is old ; and have put in evidence several prior patents issued by the United States to different patentees, older than the patent in question, the most important of which are the Dolph patent, issued in 1857, the Zug patent, issued in 1859, the Ball patent, issued in 1859, the Bartlett and Dodge, issued in 1862, and the Wemple patent of 1867.

The defendants insist that these various patents contain the principle or idea involved in the complainant's patent, so far as the rolling or rocking of the finger-bar is concerned. It is contended, for instance, that in the model of the Zug patent, which is put in evidence, there is a provision for the rocking or rolling of the finger-bar ; but I must say, that I can find no such feature, either in the specification or model. It is true that he suggests that it may be tilted, but I think, when you take his description of the construction, the only tipping he refers to is the lifting of the finger-bar by means of a lever, and not the tilting or rocking motion provided for by Graham. There is a link extending back and fastened to the frame, but there is no swivel-joint and no provision for rocking or rolling the finger-bar by means of a swivel-joint.

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And even if he had a swivel-joint at the point where the link is attached to the frame, the long shoe proceeding forward from the vibratable link or the connecting link, would effectually prevent or interfere with the rocking motion which the patentee, Graham, has accomplished ; so that I do not find the mechanism in this patent.

The same may be said of the Ball patent. Ball has the finger-beam attached firmly to the shoe. It is also steadied by a rod which reaches back to a bracket attached to the gearing carriage, and there is apparently a swivel or loose joint by which it is attached ; but there is no joint forward, and no means by which the mechanism—the finger-bar, as such, can be rolled or tipped in the manner provided by the Graham patent.

So, too, in the Bartlett and Dodge mechanism. We find this same long shoe extending forward with no device for rocking or rolling ; and the same may be said of the Zug patent. There is no possible device in the patent for the rocking, and no device or means by which the finger-beam can be rolled or tilted in the manner provided in the Graham patent.

In the Dolph patent it is equally difficult to find any mechanism which was intended to secure the peculiar motions which I find in the patent to Graham. And it may be said in reference to all these prior patents, that, while they speak of rocking, or tilting, or tipping the finger-beam, they, none of them, describe any mechanism by which it can be accomplished. It is a well-settled principle of patent law, that the mere suggestion that a given result can be obtained is not patentable, and does not anticipate a patent by another, but a mechanism or device must be described by which the suggested result is attained.

The mere saying, for instance, as was done a century, or two or three centuries ago, that vessels could be propelled by steam, did not deprive Fitch or Fulton of their right to a patent on the mechanism by which they accomplished that result. The mere idea that intelligence could be communicated by electricity, did not deprive Morse of his patent upon his mechanism. So the suggestion by these various

inventors who antedated Mr. Graham in various improvements upon the harvester, that the finger-beam may be tipped or may be rocked, does not deprive Graham of his right to a patent upon his mechanism by which he did so, as long as they did not show a mechanism by which they accomplished the same result.

The other patent put in evidence, and the one which to my mind comes the nearest to anticipating this plaintiff, is a patent to A. Wemple, of 1867. Mr. Wemple shows, in his specifications and drawings, a device by which he does produce a tilting motion of the finger-beam; but his device is so different—his mechanism by which he accomplishes the result, so unlike that of Graham, that I think the two patents may possibly both stand. At any rate, I do not think that the device of Wemple anticipates the much more simple device of Graham. It is not necessary for me to go into an extended discussion or analysis of the peculiar mechanism by which Mr. Wemple proposed to secure this rolling or tilting motion in the finger-beam. It is enough to say that I find it sufficiently different from that of Graham to justify my conclusion that he has not, so far, anticipated Graham in the art as to defeat the Graham patent.

With these views, therefore, I must hold that the defence, that the complainant's patent is void for want of novelty, is not sustained. On the contrary, I think that the evidence shows Mr. Graham to be the first who has really accomplished this desirable tilting or tipping motion successfully, by the simple mechanism which he shows in his drawings and patent. The only other question left in this case, then, is the question whether the machine of the defendants infringes complainant's patent. The model of defendants' machine which is put in evidence—known as the "Sprague Mower," shows a vibratable link to which the finger-bar is connected by precisely the same mechanism—that is, a swivel-joint—that connects the finger-bar of Graham's machine to the vibratable link. The vibratable link in the Sprague mower is not constructed precisely, so far as the shape is concerned, like the vibratable link of Graham, but it reaches back—is fastened firmly to the gearing carriage, or to a

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bracket which is connected with the gearing carriage by a swivel-joint, and is worked by a lever—not a vertical lever, but a lever which secures the motion of tilting up and down, in the same manner as the Graham patent. It does not roll or tip so much as Graham's finger-bar, but it is the same motion, although less in degree, and I am very clearly of the opinion that the device is essentially the same. It has been urged, and was very earnestly contended at the trial, that this device lacks the swivel-joint M, and that it, therefore, does not contain all the elements of Graham's device.

Here we have a draught-rod connected by a hook-joint to a vibratable link, and extending forward and fastened to the frame. But it is contended that the swivel-joint is not there. I must say that I think the patentee, or whoever prepared the specifications in the Graham patent, is a little unfortunate in the choice of terms by which he describes his mechanism. In one sense there is no swivel-joint here in the defendants' machine. That is, it is not technically a swivel-joint, and especially the draught-rod is not connected to the vibratable link by what is strictly called a swivel-joint. It is a mere hook, but it performs all the functions of Graham's draught-rod and swivel-joint, and must be considered the equivalent of Graham's device in that particular. It is nothing after all but an equivalent mode of producing the same result.

There is a draught-rod hooked to the vibratable link, and extending forward and passing through the gearing carriage so as to secure a steady, uniform draught of the cutting apparatus in a forward direction. It is equally true that the lever by which the vibratable or tilting motion is secured is not a vertical lever, but that makes no difference—whether the lever lies down horizontally or stands up. It performs the function or office of vibrating and tipping this finger-bar. The result is precisely the same in both cases.

I am, therefore, of the opinion that an infringement is shown by the proof, and that the patent is not void for want of novelty, so far as the evidence in this case enables me to judge. This case will, therefore, be sent to the master to assess the damages, unless the parties stipulate that no damages need be assessed.

Moore v. Thomas.

Ephraim Banning, Hains & Tripp, and Geo. L. Chapin, for the complainant.

West & Bond, for the defendants.

HIRAM MOORE ET AL.

vs.

JOSEPH W. THOMAS ET AL. IN EQUITY.

The second claim of the Letters Patent granted to Hiram Moore, November 20, 1860, for improvements in seed-drills, was for the combination of the separate bearings of a cylinder for distributing the seed, with a single shaft-bearing in the cylinder, shorter than the cylinder and larger than the shaft. In the defendants' machine the seed was distributed by a revolving wheel or disc with flanges upon the periphery : *Held*, upon the construction of the patent given by the court, that the claim must be limited to that class of machines having cylinders, and does not include those with flanged discs or wheels, and that consequently there was no infringement.

The third claim of the patent was for "a distributing-cylinder for seeding-machines, having a bevelled bearing substantially in the manner and for the purposes specified : " *Held*, that as, upon the construction given to the patent by the court, and upon the evidence, it appeared that the object of the bevel in complainant's patent was to prevent dust and other obstructions from entering the bearings, and that the construction of defendants' seed wheel was such that there was no liability of such obstructions entering the bearings, and further, that if there was any bevel in the defendants' machine more than was incident to the molding of it, it was so slight as to bear no part in the operation of the machine, such bevel did not constitute an infringement.

The sixth claim of the patent issued in 1861, to the same patentee, was for the combination of a removable driving-shaft, with a series of seeding-cylinders having independent bearings, whereby said shaft could at pleasure be removed to allow any of said cylinders to be taken out for repairs, without displacing the rest : *Held*, that this claim was merely for a multiplication or aggregation of the seeding cylinders described in the first patent, and was not patentable.

The invention of the patentee, under which the defendants manufacture, having been completed at about the date of that described in the complainants' patent, and there being no lack of diligence in applying for a patent, the court construed complainants' patent strictly, to avoid infringement, and to sustain both grants.

(Before BROWN and SWING, JJ., Southern District of Ohio, July, 1877.)

Moore v. Thomas.

This was a suit in equity for the infringement of Letters Patent No. 30,685, November 20th, 1860, and No. 31,819, March 26th, 1861, granted Hiram Moore for certain improvements in seed-drills. The defendants manufactured under the patent granted to Gilbert Jessup, June 25th, 1861, No. 32,627.

BROWN, J.

Complainants claim to recover for an infringement of the second and third claims of Moore's patent of 1860, and for the sixth claim of his patent of 1861. I will proceed to dispose of these claims in their order. The second claim of the patent of 1860 is as follows :

"2. I claim the combination of the separate bearings of the cylinder with a single shaft-bearing in the cylinder, shorter than the cylinder and larger than the shaft, in the manner and for the purposes substantially as specified."

To understand exactly the nature of complainants' invention, it is necessary to examine with some care the language of Moore's specification. After setting forth the general nature of his improvement, he says :

"The object of my said improvements, is more evenly and equally to distribute the grain or seed to be sowed, and to render the machine more simple, and less liable to get out of order, and they relate particularly to that class of seeding-machines in which a toothed distributing cylinder is used at the bottom of a seed-box or hopper, in order to distribute the grain or seed. They consist, first, in combining a conduit or passage for the grain, arranged between the bottom of the hopper and the discharging-orifice, with the oblique discharging-orifice and the distributing-cylinder. Second, in combining separate bearings for the cylinders with a single bearing in the cylinder for the shaft, in the manner hereinafter described. By this means we attain important advantages. The warping or twisting of the seed-box is a fruitful source of trouble in machines of this class, for the hopper, being rigidly fastened at the bottom of the seed-box, any warping or twisting of the latter will cause the hopper to change its position relative to the shaft, and if the cylinder be firmly fasten-

ed upon its shaft, it will bind against the sides of the hopper, and, in its bearings, producing much friction and increasing the draft of the machine and its liability to get out of order. By having the shaft-bearing in the cylinder larger than the shaft, and short, the evil effects of a displacement of the cylinder will be obviated in a great measure, as the axis of the cylinder need not be coincident or even parallel with the axis of the shaft, but may vary considerably from it without the cylinder binding upon the shaft, and the cylinder will still be controlled by the revolution of the shaft, the cylinder being retained in place within the hopper by its own independent bearings. I am aware that distributing-cylinders have before this been placed loosely upon shafts at the bottom of hoppers, but without separate bearings, so that they cannot retain their proper relative position within and to the hoppers, and consequently the flow of seed or grain is irregular and uneven."

Bearing in mind that his actual invention was an improvement in machines in which a tooth distributing-cylinder was used ; that in his specifications he announces that his improvements relate particularly to that class of seeding-machines ; that the cylinder is a prominent feature in all of his claims ; that the evil, which the device set forth in the second claim was designed to remedy, "is said to be a fruitful source of trouble in machines of this class," I think the words "shaft-bearing in the cylinder, shorter than the cylinder and larger than the shaft," were intended to be limited to that class of machines having cylinders, and not flanged disks or wheels, for the distribution of seed. When they are applied to machines having toothed distributing-cylinders, the value of complainants' invention is at once manifest. If the shaft-bearing were made the whole length of the cylinder, the shaft would have to be made smaller than the bearing, in order to get the lateral play so essential to prevent binding and friction, and the longer the bearing the smaller would have to be the shaft. But if the bearing be very short, a difference of one thirty-second of an inch between the shaft and the bearing will allow sufficient play. The value, too, of an independent bearing for the cylinder is no less obvious. By this means the

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cylinder is retained in its exact relative position to the hopper, while its position to the shaft may constantly change without binding, or impairing the operation of the machine.

Defendants' device is constructed on a different principle. In his machine, the seed is distributed by a revolving wheel or disk, with flanges upon the periphery. There is nothing in the wheel which answers the definition of a cylinder, unless this word be extended and construed to include the hub. Webster defines a cylinder to be "a long, circular body, of uniform diameter, and its extremities forming equal parallel circles."

I think the application of this term to the hub of the wheel is unwarranted by the definition, or by the common acceptance of the term.

Moore states in his specifications, that distributing-cylinders have, before this, been placed loosely around shafts at the bottom of the hoppers, but without separate bearings, so that they cannot retain their proper relative position within and about the hoppers, and consequently the flow of seed or grain is irregular and uneven. Now, it being conceded that the shaft may be made smaller than the bearing without infringing the second claim, and admitting that separate bearings may be used for the hub or cylinder, provided that the short shaft-bearing be not also used, it seems to make no practical difference in the operation of defendants' devices whether the shaft-bearing in the hopper be made shorter than the hub, or not. If defendants' witnesses, Blanchard, Bogle and Ludlow, are to be believed, and they seem to be uncontradicted, there is no liability to warping or twisting in their machine, and hence, no utility in a shaft-bearing shorter than the hub. I think complainants' exhibit, "defendants' seed-cup," is not an infringement of this claim even upon complainants' theory, since the bearing is of uniform size throughout the whole length of the hub, with the exception of slight and immaterial coring out in the middle; neither do I regard defendants' exhibit, "Thomas, Ludlow & Rogers' seeder," an infringement, since the flanged wheel has no hub at all, but simply a square hole in the centre for the reception of the shaft, and, hence, no separate bearings, the wheel

dropping upon its periphery when the shaft is removed. It is true there is a hub or thimble upon one side of the wheel, separate from the wheel, which revolves with the shaft upon a bearing of its own within the casing, and perhaps this might constitute a separate bearing for the wheel, within the meaning of the patent; but, as the square apertures through the hub and the wheel are the same size, the shaft-bearing cannot be said to be shorter than the cylinder, unless the other side of the hopper, which contains a round hole for the passage of the shaft, be also construed as a part of the cylinder. I do not think it will warrant this construction.

There is more difficulty about complainants' exhibit, "defendants' hopper, with seed-cup and driving-shaft;" and upon complainants' theory of the construction of their patent there would be an infringement, inasmuch as the hub has a separate bearing of its own, and a shaft-bearing shorter than the hub and larger than the shaft, but holding, as we do, that complainants' patent was intended to apply to a different class of machines, and that the short hub of the vertical distributing-wheel or disk used by defendants is not embraced in the word "cylinder," used so often in complainants' specification, we also feel bound to hold there is no infringement in defendants' device.

There are strong equities in favor of the defendants arising from the respective dates of their inventions. It is well settled, that an invention is not patentable until a machine has been perfected; and, if not actually used, made capable of useful operation. *Agawan v. Jordan*, 7 Wall., 583; *Seymour v. Osborne*, 11 Wall., 552; *Goodyear v. Day*, 2 Wall., Jr., 299; *Coffin v. Ogden*, 18 Wall., 120. Within this definition Moore's invention was not patentable until the spring of 1859, although it seems that as early as the summer of 1857 he had made some experiments, and completed rough drawings of his invention, in the State of Michigan, in or near Grand Rapids. In the spring of 1858 he seems to have had a contrivance substantially in the form of his invention, which he kept in his house, and worked as a model. He left Michigan in March, 1858, and moved to Wisconsin, and during the winter of 1858-59 had a full-sized drill completed, containing seed-cups

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like his exhibit, operated by a square wooden shaft, which was experimented with by his nephew in sowing wheat on his farm, on or about April 27th, 1859. From all this testimony, I think we are not authorized to conclude that his invention was perfected before the spring of that year.

While these experiments were going on, one Gilbert Jessup, in another State, and some hundreds of miles distant, with no opportunity or suspicion of piracy, was perfecting an invention embodying the substantial principle of defendants' device. While the exact day upon which his invention was so far perfected as to be patentable cannot be ascertained, the testimony shows that he had completed twelve machines by May, 1859. It is scarcely probable that he would have made that number of machines until after he had perfected his invention, and I think, under all the circumstances, we are authorized to conclude that he was entitled to a patent quite as soon, if not sooner than Moore. He appears to have commenced proceedings to obtain a patent as soon as May, 1860, but owing to some delay on the part of his solicitors in New York, his application was not placed upon file until after the Moore patent had been issued. It is very difficult to fix the precise relative dates of these inventions, but in view of the fact that no suspicion of bad faith attaches to Jessup; that his invention was at once put into practical operation and the manufacture of machines commenced on a large scale, we think the court is bound to sustain his invention, if possible, particularly as the principle upon which it operates is quite different from that of the complainants' device.

The third claim of complainants' patent of 1860 is as follows :

"I claim a distributing-cylinder for seeding-machines, having a bevelled bearing, substantially in the manner and for the purposes specified."

Here again complainant limits himself to distributing-cylinders, evidently having reference to the periphery feeding-cylinder set forth in his specifications. The value of a bevelled bearing in cylinders of this kind results from the tendency of particles of earth, chaff and dust, carried on the periphery of his wheel, to work toward the end and into

the bearings, whence they are discharged with the seed. If we are to believe the testimony of defendants' witnesses upon this point, it would appear that the construction of their seed-wheel is such as to prevent the dust and chaff from entering the bearings of the seed-wheels, the repeated revolutions of the wheels having a tendency to throw such particles toward the periphery, and that the taper of the hub performs no function whatever in sewing the grain. It seems, too, that the operation of molding both hub and periphery is assisted by a slight taper from the centre outward, and if the beveling in the hub is greater than the convenience of molding requires, it is so slight as apparently to play no part in the operation of the machine. Upon this point defendants' witness, Bogle, testifies as follows :

"I have never discovered any difficulty arising from the effects of dirt or straw getting into the bearings of the seed-wheel and casing. In fact, the seed-cups referred to as manufactured by our company are so constructed that there is no liability whatever of dirt, straw or obstructions getting into said bearings, the hub of the distributing-wheel being entirely incased by casing, said casing being so formed that it affords a conducting surface by means of which the grain is carried over the bearing down into the seed and against the vertical face of the distributing-wheel, thus being prevented from coming in contact with the bearings of said wheel, in any manner. The said casing is fitted closely to the vertical face of the distributing-wheel, and the rotating motion of the wheel inclines the grain or other material finding its way into the seed-cup, toward the inner periphery of the carrying-flange found upon the vertical face of the wheel, thus conducting it directly away from contact with the bearings of the wheel and casing, and if the space between the casing and face of the wheel was even large enough to permit dirt, straw or other obstructions to pass through, the motion of the wheel, aided by gravity, would tend to carry such obstructions immediately toward the flange of the wheel, as above stated, thereby preventing any trouble whatever that might occur under a different construction of the seed-cylinder and its casing."

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The sixth claim of Moore's patent of 1861 is for "the combination of a removable driving-shaft with a series of seeding-cylinders having independent bearings, whereby said shaft can at pleasure be removed to allow any of said cylinders to be taken out for repairs without displacing the rest, substantially as described."

The same principle of construction allied to the two prior claims will also limit this to the toothed distributing-cylinders described in the specifications.

It seems to me, too, that so far as this claim is concerned, there is nothing in the patent of 1861, not already found, or at least suggested to a mechanic of ordinary intelligence, in the patent of 1860. The shaft used in the earlier patent, being smaller than its bearing, must have been removable, and as the later patent does not claim any particular device for removing, it is satisfied by any shaft which is removable. Nothing else is set up in this claim but a multiplication of the seeding-cylinders described in the first patent. This is not patentable.

The bill must be dismissed.

Bowman, Pringle & Scot, for the complainants.

Wood & Boyd, for the defendants.

E. MILLER & COMPANY

VS.

THE BRIDGEPORT BRASS COMPANY. IN EQUITY.*†

The second claim of the reissued letters patent granted to E. Miller & Co., as assignees of Joshua E. Ambrose, January 11th, 1876, for an "improvement in lamps" (the original patent having been granted October 16th, 1860, and reissued May 20th, 1873, and, as so reissued, extended for 7 years from October 16th, 1874), namely, "The combination, in a lamp-burner, of the following elements: first, a deflector; second, a perforated air-distributor, which, with the deflector, forms the combus-

* 14 Blatchf. C. C. R., 282.

† Affirmed by Supreme Court, 3 Morrison's Tr., 419.

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tion-chamber; third, a wick-tube, extending from the fount to the combustion-chamber; fourth, a tube or passage to conduct the gas from the fount to said combustion-chamber, substantially as described," is for a different invention from any which was described and claimed in the original patent, and is invalid.

The combination contained in said second claim contains a lesser number of ingredients than the combination which composed the original invention, and the specification of the original patent did not suggest that a lamp containing the modified combination of the second claim of the reissued patent was feasible and within the scope of the invention, and, therefore, under the rule laid down in *Gill v. Wells* (22 Wall., 1), said second claim is void.

(Before SHIPMAN, J., District of Connecticut, August, 1877.)

SHIPMAN, J.

This is a bill in equity to restrain the alleged infringement, by the defendants, of reissued letters patent, which were issued on January 11th, 1876, to the plaintiffs, as assignees of Joshua E. Ambrose, for an improvement in lamps. The original Ambrose patent was dated October 16th, 1860, and was reissued May 20th, 1873, and the patent, as reissued, was extended for seven years from October 16th, 1874. The principal defences are, that the reissue is not for the same invention which was described and claimed in the original patent, and that the patent is void for want of novelty.

In the original patent, the patentee declared the object of his invention to be, to obtain a lamp which will burn, without a chimney, and without danger of explosion, those hydro-carbons which are volatile, and contain an excess of carbon, and stated that "the invention consists in the employment or use of a perforated cap, vapor tube, heaters and deflecting plate, arranged," as described, and in a wick adjusting mechanism, which last named element is immaterial in this case. In the specification, the invention was, in substance, described to be the upper part of the body of a lamp, which received at its upper end a cap, C. This cap was of cylindrical form, and might be constructed of perforated sheet iron, the upper end having a perforated plate, *c*, fitted in it. The wick tube was within the cap or perforated cylinder. Adjoining the wick tube was a tube, F, the

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lower end of which communicated with the interior of the body of the lamp, the upper end of said tube being covered by the perforated plate, *c*. On the upper end of the cap, C, was placed a copper dome-shaped heater, G, slotted at its upper end. A longitudinal bar in the centre of the slot divided it into two parts. The specification proceeded: "The wick tube, E, extends some distance above the perforated plate *c*, and, on its upper end, a collar, *p*, is fitted, said collar having plates, *q*, projecting from it, slightly inclined from a horizontal plane. Between the inner ends of the plates, *q*, and the collar, *p*, there are openings *r*. On the outer side of the heater, G, there are vertical ribs, *s*, at the lower ends of which there are projections, *t*. These projections, *t*, serve as bearings for a heater, H, which is similar to G, in form. The ribs and projections, *t*, admit of a space, *u*, being between the two heaters, and the upper end of the heater, H, is slotted, as shown at *v*, and has a plate, *w*, extending upward for each end of it, and inclined at an angle of about 45°. The tube, F, admits of all vapor generated in the body, A, of the lamp, escaping up into the heater, G, and to the flame, the perforated plate, *c*, preventing the ignition of the vapor below the orifice of the tube. The plates, *q*, of the collar, *p*, and the openings, *r*, cause a draught to ascend directly upward to the flame, and air is also deflected directly against the inner sides of the heater, G, and becomes intensely heated, so as to supply the flame with warm oxygen. The bar, *o*, in the slot, *n*, of heater, G, serves to divide the flame, and prevents it from ascending up through the slot, *n*, before the carbon is consumed. Between the two heaters, G, H, oxygen passes and becomes highly rarefied, and unites with the carbon in the flame, insuring perfect combustion. The plates, *w*, at the ends of the slot, *v*, of heater, H, serve to spread the flame and diminish its height, thereby keeping the flame at the point where the heat is most intense. The flame at the slot, *n*, in heater, G, is merely a gas-generating flame, the illuminating flame having its base at the slot, *v*, of heater H. By this arrangement the flame is supplied with sufficient oxygen, without a chimney, to support proper combustion and produce a brilliant illuminating flame, and the vapor which passes up through tube, F,

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is consumed without danger of being ignited below the orifice of said tube." The patentee, after stating that he was aware that dome-shaped heaters had been previously used, and, also, that perforated caps had been used in connection with said heaters, and disclaiming said parts when separately considered, claimed as his invention, "First, the arrangement of the heaters G H, with a space between them communicating directly with the external air, in connection with the collar *p* and plates *q q*, fitted on the top of the wick tube E and the perforated cap C, substantially as and for the purpose set forth; second, in combination with the parts aforesaid, the vapor tube F, placed within the cap C, and adjoining or contiguous to the wick tube, as and for the purpose specified."

This lamp was not a success, as a lamp which would burn without a chimney, and did not go into general use, but it contained valuable features. The tube, F, conducted the gas from the fount to a point near the end of the wick tube, so that the gas was conveyed to the flame and was consumed, and thus the danger of explosion was materially diminished. In addition, the upper part of the perforated cap, C, was a minutely perforated plate, or disk which extended transversely over the entire top of the cap, below the flame (forming the floor of what is styled, in the reissued patent, the combustion chamber), and prevented the return of lighted gas to the lamp fount below, or the ignition of gas within the cap, C, upon the principle of Sir Humphrey Davy's safety lamp. Thus, the combination of the tube and the perforated plate prevented danger of explosion. The perforated plate also performed the office of a distributor of air into the space where the wick was lighted and to the flame.

Lamps having these characteristics, in connection with the other well-known parts of volatile oil lamps—a wick tube, a dome-shaped chamber, which serves to direct the air to the flame, and is generally called a deflector, and a chimney, were subsequently manufactured by the owners of the patent, and went into general use. The patent was reissued for the second time, in 1876. The specification of the reissue declares that the invention consists, secondly, "in combining,

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in a lamp burner, a deflector, a perforated air distributor, with the deflector, forming the combustion chamber, a wick tube extending from the fount to the combustion chamber, an adjusting device to regulate the elevation of the wick, and a tube to conduct the gas from the fount to the chamber above the air distributor." The descriptive portion of the reissued specification does not substantially differ from the language of the descriptive portion of the original specification. In the new specification prominence is given to the perforated plate *c*, which is called "a perforated air distributor, which, with the deflector, forms the combustion chamber." The second claim, which is the only one which is alleged to have been infringed, is as follows: "2. The combination, in a lamp-burner, of the following elements: first, a deflector; second, a perforated air distributor, which, with the deflector, forms the combustion chamber; third, a wick tube, extending from the fount to the combustion chamber; fourth, a tube, or passage, to conduct the gas from the fount to said combustion chamber, substantially as described."

The lamps made by both plaintiffs and defendants contain the heater, *G*, without the ribs or projections or longitudinal bar; in other words, an ordinary deflector, the perforated plate, the vapor tube, and a wick tube; and are in great demand by the public. The utility of the lamp consists in its safety.

A tube which conducted the vapor from the fount to the flame was used, in its simplest form, in the lamp of William Pratt, patented in 1857. In this lamp the flame was not to be protected from the external air. The wick tubes were the long diverging tubes now in common use.

Air distributors had long been known in lamps of the Ambrose class, but I am of the opinion that the minutely perforated transverse plate, *c*, extending across the lower part of the chamber below the flame, thus forming a perforated floor, and performing the double office of preventing the lighted gas from communicating with the gas in the lamp fount, and also of distributing air to the combustion chamber, had not been anticipated in the defendants' exhibits. But it is not necessary to determine whether either the tube or the

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air distributor was novel in itself, as the combination only is claimed, and I am satisfied that the combination of the vapor tube to conduct the gas from the fount to the combustion chamber, and the perforated plate constructed as in the Ambrose patent, and performing its double office, with a wick tube, and with either the heater or deflector of Ambrose, or the ordinary deflector, was unknown prior to the date of the patent.

The important question in the case is, whether the lamp which is described and claimed in the second claim of the reissue, is the same invention which was described and claimed in the specification of the original patent. The principles upon which the decision of this question rests, are stated in *Gill v. Wells*, 22 Wall., 1, and in *Stevens v. Pritchard*, 10 Off. Gaz., 505. In the former case, the court, after declaring the rule to be, that, where a patentee who has invented a new and useful combination of several ingredients, also claims to have invented new and useful combinations of fewer numbers of the ingredients, the inventor is entitled to a patent for the several combinations, and may give a description of the several combinations in one specification, and may secure the benefit of each of the inventions by separate claims, and that if, by inadvertence, he should fail to claim one of the described combinations, may surrender the original patent and obtain a reissue for any combinations which were omitted in the claims of the original patent, proceed to say : " Very different rules, however, apply in a case where the only invention described in the original patent is the one which includes all the ingredients of the machine, provided there is no suggestion, indication, or intimation that any other invention of any kind has been made. Such a patentee as the one last mentioned may subsequently discover that he can accomplish a new and useful result by a combination embracing less than the whole number of the ingredients included in the prior patented combination, but he cannot secure the right and privilege of a patentee in the combination of the smaller number of the ingredients by a surrender of his first patent and a reissue of the same which shall include the second combination as well as the first, because

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the reissued patent in that event would not be for the same invention as the surrendered original."

The original patent states the object of the invention to be a lamp which would burn without a chimney, and the entire mechanism is directed to accomplish that object. It consisted, generally, of a wick tube, with collar and plates, perforated cap for the conveyance of air, the vapor tube, and two peculiarly constructed heaters, the lower one, G, provided with ribs and projections, which served as bearings upon which the upper heater, H, was placed. The two heaters are related to each other, and the entire arrangement of the two, with their various parts, is particularly described, in the specification, to be designed to supply the flame with sufficient oxygen to support proper combustion without a chimney.

The invention, so far as the heaters were concerned, consisted in their joint use. The lamp of the second reissued claim is without the complex arrangement of heaters. It contains one deflector and is the ordinary lamp, with a chimney, for burning volatile hydro-carbons, *plus* the vapor tube and the perforated plate.

The specification of the original patent suggested no invention save the one contained in the entire combination. A combination of the vapor tube and the perforated plate, either with one heater, or with the other well-known ingredients of a lamp, was not indicated as a distinct part of the invention. The second claim of the reissued patent describes an article materially different from the article which was originally patented. The claim contains a combination of a lesser number of ingredients than the combination which composed the original invention. One of the heaters, and all of the caps except the perforated plate, have disappeared. The deflector of this claim is not the heater, G, of the original specification, because no single deflector was therein described, except in its relation to, and as connected with, the upper heater. The two heaters are described as to be used together, and as necessarily related to each other. The whole scope and object of the invention was to produce a lamp by the combined use of the two heaters.

Had the patentee, in his original specification, suggested

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that a lamp containing the modified combination of the second claim of the reissue was feasible and within the scope of his invention, or that the combination of the vapor tube and the air distributor with the other well-known parts of a lamp, would accomplish a beneficial result, the claim of the reissue would not have been in violation of the rule of law which has been quoted. But, upon the face of the two patents, I am of opinion that the claim of the reissued patent is for a different invention from any combination which is indicated or suggested in the original specification as capable of embodiment, so as to compose either an organized structure, or a distinct part of an organized structure.

A decree should be entered dismissing the bill.

John S. Beach, for the complainants.

Charles R. Ingersoll, for the defendants.

DANIEL W. VAUGHAN

v's.

THE CENTRAL PACIFIC RAILROAD COMPANY.
IN EQUITY.*

Where the infringer makes a profit by the sale or use of the invention, the patentee has an election of remedies for an infringement of his patent, viz., by an action at law for the actual damages sustained, and treble damages if allowed by the court, or by a suit in equity for an account and recovery of the profits made by the infringer.

If the invention is such that, in the nature of things, there can be no profits in the legal sense of the term, and the limit of the injury for the use of the invention must necessarily be the value of the license fee, the patentee has a complete remedy at law.

In a bill for a discovery only, in aid of an action at law, it must be alleged that the facts sought to be discovered are material to the complainant's

* 4 Sawyer, 280.

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case, and that the discovery of them by defendant is indispensable as proof.

A license fee, if established, is the measure of the injury fixed by the patentee himself, and in that event the only damages recoverable by reason of the infringement is the amount of the license fee for the number of infringing articles used.

A general allegation of profits in the bill is not sufficient to sustain it, where it is plain to the court, from the nature of the invention set forth in the bill, that there can be no profits, and a demurrer will, in such case, be sustained.

(Before SAWYER, J., District of California, August, 1877.)

SAWYER, J.

This is a bill in equity, seeking an account and recovery of the gains and profits resulting to the defendant from the use of an "improvement in the mode of operating brakes for cars, or railway carriages," patented by the plaintiff's assignor whose patent defendant is alleged to have infringed. The term of the extended patent expired October 4th, 1870, and the infringement complained of occurred before that date.

The defendant demurs to the bill on the ground, mainly, that, upon the facts alleged, the complainant has a plain, adequate and complete remedy at law, and, therefore, that the bill does not present a case for equitable cognizance. The bill not having been filed for several years after the expiration of the patent, presents no ground for an injunction, and none is sought. As a bill for an injunction, therefore, it affords no ground for equitable relief.

The bill alleges, generally that defendant used the patented improvement, "but how many such brakes for railroad cars defendant so used and operated * * * your orator is ignorant and cannot set forth; but your orator avers, that defendant so used and operated, or permitted to be used or operated, a large number thereof," and that "it derived and realized large profits," etc., but to what amount your orator is ignorant and cannot set forth; "and he prays that the defendant may be required to make disclosure and discovery of the full amount thereof." He further prays that defendant be decreed to account for and pay over all gains, profits, etc.

It seems to be the recognized view of the courts, that there

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may be cases, such as where the infringer makes a profit by the sale or use of the invention, wherein the patentee may have an election of remedies for an infringement of his patent, viz., by an action at law to recover the damages sustained, in which the actual damages may be trebled, in the discretion of the court ; or, by a suit in equity for an account and recovery of the profits made by the infringer from the sale or use of the invention. *Cowing v. Rumsey*, 4 Fish., 277 ; *Packet Co. v. Sickles*, 19 Wall., 617 ; *Burdell v. Denig*, 2 Otto, 720. It would seem from these authorities, that the equity jurisdiction in the latter case rests on the ground of a trust. The patentee being entitled to the profits resulting from the sale or use of his invention, the infringer is converted into a trustee for the patentee, as regards the profits thus made, and of which he would otherwise be deprived.

But, in order to maintain a suit in equity for an account of profits, there must be actual profits resulting to the infringer, susceptible of computation or estimation, of which the patentee could be deprived, and with which the infringer can be charged as trustee. If, from the character of the invention, there can be nothing in the nature of profits of which the patentee can be deprived, there is no basis for charging the infringer with receiving profits for his benefit, and nothing for which he can be called upon to account.

As the defendant's counsel well observes, if one should invent and patent a more comfortable bed than any heretofore existing, and another should infringe the patent by using it, the use of the bed might well be more agreeable, and afford greater comfort and satisfaction to the infringer than any other ; yet it would be absurd to say that he derived any pecuniary profits from its mere use with which he could be charged as the trustee of the holder of the patent ; or that there is any basis of profits, in the legal sense of the term, for which he could be called upon, in a court of equity, to account. It would be impossible to predicate profits in any just sense upon such an infringement. It would furnish no element for the basis of an account. The same is true of many inventions. To my mind it seems clear that the invention now in question is of this class. The patent is for an "improvement

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in the mode of operating brakes for cars or railway carriages." It is not even for an entire brake, but only for an element in a brake. The infringement is by the use of it on defendant's road. In order to use it at all, the infringer must have a road, with rolling-stock and all the expensive equipments and paraphernalia of a road, including cars and other portions of the brake. How is it possible to separate this comparatively almost infinitesimal part of the whole from the combined elements necessary to construct, equip and operate a railroad, and say that so much of the profits resulting from the whole, if any profits there are, shall be attributed to the very small element embodied in this improvement? By what rule or measure shall it be determined what advantage, in money, results to the infringer, from its use? There is no loss to the patentee beyond the mere value of his license. And even in that particular there is no loss in any other sense than that he fails to get what he never had, and never could have, unless he gets it from the defendant. He could not have used the invention himself upon the defendant's road, and he could not have sold it to anybody else to use, and thereby have derived any profit from the sale; for nobody but the defendant could use it on defendant's road, and the use by defendant on its road could not possibly have interfered, in any way, to prevent the complainant from selling his invention for use on any other road. Unless defendant had used these brakes, they would not have been used at all, or sold for use anywhere else. The complainant would have been no better off if defendant had not used his invention, and he is in no worse condition by their use, than he would have been, had his invention not been used. It is for his interest, then, that the defendant should use as many as possible, provided he is paid the value of the license for their use; and if defendant does use them, there is no loss whatever resulting from a possible sale to, or use by, other parties, and no loss beyond the money value of the license to which he is entitled. From the nature of the invention, and its use, the only possible measure of damages, and the only sum for which the defendant is liable, is the value of the license upon the number of brakes used, embracing the invention, except that the damages

may be trebled, in the discretion of the court. This view is expressly recognized by the Supreme Court in *Seymour v. McCormick*, 16 How., 489, where, on discussing the rule of compensation for the infringement of patents, it is said, "one who invents some improvement in the machinery of a mill, could not claim that the profits of the whole mill should be the measure of damages for the use of his improvement. And when the profit of the patentee consists neither in the exclusive use of the thing invented or discovered, nor in the monopoly of making it for others to use, it is evident that this rule could not apply. The case of Stimpson's patent for a turn-out in a railroad may be cited as an example. It was the interest of the patentee that all railroads should use his invention, provided they paid him the price of his license. He could not make his profit by selling it as a complete and separate machine. An infringer of such a patent could not be liable to damages to the amount of the profits of his railroad, nor could the actual damages to the patentee be measured by any known ratio of the profits of the road. The only actual damage which the patentee has suffered in such a case is the non-payment of the price which he has put on his license, with interest, and no more." Stimpson's patent turn-out for railroads referred to by the court is entirely analogous to the invention now in question. So in the case of *Sanders v. Logan*, arising upon a patent for "an improvement in winnowing machines." Mr. Justice Grier says: "The invention claimed is for an improvement in the machinery of grist-mills, and the only injury to plaintiff's rights exists not in using his invention, for it is his interest that all mills should adopt and use it, provided he is paid the price of a license. Such price or value of a license is the true measure of the 'actual damage' suffered, and of the remedy which the patentee can obtain, or has a right to claim in equity. * * * Where the measure of damage is a certain sum, and does not require an account of profits, the peculiar jurisdiction of a chancellor is not needed for that purpose." *Sanders v. Logan*, 2 Fish., 170. And in *Livingston v. Jones*, 2 Fish., 209, the same learned judge says: "If the inventor's profit consists neither in the exclusive use of the thing in-

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vented, nor in the monopoly of making it for others to use, but in having a general use of it by all who are willing to pay him the price of his license, then the non-payment of the license fee by the infringer is the only wrong done to the patentee. The only cases in which the measure of the patentee's damages is the amount of the infringer's profit, are, when the invention is of some new machine, or a new form of any kind of known machine, which, as a distinct species of machine or manufacture, is more valuable, or can be put in market cheaper, so as to supersede or exclude other machines or manufactures of the same genus; and where the profit of the patentee consists in a complete monopoly of the right to make and vend the new machine or manufacture as a unit, and in the exclusion of all competition. In such a case, the only measure of damage in a court of equity is the amount of profits made by the infringer, and it is in such cases that the injured party should seek his remedy in a court of chancery, where he can have a decree for an account, and an injunction to protect his monopoly. But it is plain that a patentee, whose invention is only valuable because used by all who pay a license fee, and who suffers no other wrong than the detention of such fee, has fixed his own measure of compensation, and needs none of the remedies which it is the duty of the chancellor to give for his protection. An injunction would do him no good; an account is not wanted; and the only remedy to which he is entitled being a judgment for a given sum of money, with interest, a court of law is his proper resort, where also he may recover a penalty to the extent of treble damages, if the judge sees fit to inflict it." The case made by the bill is emphatically one of the kind referred to in the cases cited. There is no element in it upon which to base an account of profits. The only injury, as said by Mr. Justice Grier, is not in the use of the invention, but in refusing to pay the value of the license for its use. If a license fee is established, that is the measure of the injury fixed by the patentee himself. If not, then its value must be found from other evidence, and in both cases, and especially in the latter, the question of the novelty of the invention, as well as the question of infringement, is peculiarly one

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for determination by a jury. There is nothing requiring the aid of a chancellor.

As a bill for an account of profits, then, it fails to show a case for equitable cognizance. As no case for an account is presented, of course there is no need of a discovery in aid of an account.

So, also, the bill fails to present a case for discovery as an independent ground of equitable jurisdiction. A bill purely of discovery, in aid of the jurisdiction of a court of law, must allege that the facts are material to the plaintiff's case, and that the discovery of them by the defendant is indispensable as proof; for, if the facts lie within the knowledge of witnesses who may be called in a court of law, that furnishes sufficient ground for a court of equity to refuse aid. In such a case there is no need of discovery. *Gelston v. Hoyt*, 1 John. Ch., 547; *Seymour v. Seymour*, 4 John. Ch., 409; Story's Eq. Jur., sec. 74, 690, 1493b. In this bill there are none of these essential allegations; and it is apparent that none could be truthfully made, for the sole defendant is a corporation—an ideal, non-sentient being, that can have no knowledge, and can only answer under its seal; while all the facts are necessarily within the knowledge of living individuals, the officers and employees of the corporation, who must, from the nature of the case, furnish the information; and all are competent witnesses, who can be called upon to testify and furnish the information in a court of law as fully and effectually as in a court of equity. If the complainant had commenced an action at law to recover the license fee, or the value of a license for the number of brakes used, I apprehend the bill would not be entertained upon the facts of this case, by any court of equity, for the mere purpose of discovery in aid of such action.

If the views expressed are sound, then the plaintiff has a "plain, adequate, and complete remedy at law" in an action for damages, the full measure of which is the value of a license for the use of his improvement. This remedy is as plain, easy, practical, prompt and effectual as any that can be afforded in equity. As the actual damages may be trebled, it is in this respect a better remedy. And where such a remedy is afforded at law, the statute expressly provides that

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a suit in equity shall not be maintained in the courts of the United States. Rev. Stat., sec. 723. It is claimed, however, that there is an allegation in the bill, that profits have accrued, and that this is sufficient on demurrer. *Nevins v. Johnson*, 3 Blatchf. C. C. R., 80, is cited in support of the bill. The demurrer was overruled in that case, but the court said, in the course of the opinion: "It" (the jurisdiction) "must rest upon the case made by the defendant on the merits, for the court afterwards to determine whether the jurisdiction will be exercised in equity, or only by suit at law." In that case there was some possibility that profits, as such, might accrue from the use of the invention. But in this case it is plain, from the nature of the invention set out in the bill, that it can furnish no element for estimating any actual profits accruing from the use of the invention, and that the measure of the plaintiffs recovery must, from necessity, be the license fee or value of the license for its use. The use to which a brake is put, and its relation to the car, or the railroad and its operation, is, at this day, matter of common knowledge, and of which the court can take notice, as such, especially in connection with the description of its use and operation, given in the bill. *Brown v. Piper*, 1 Otto, 42, 43. Should the case go to a hearing, and it should turn out, upon the evidence, that there was no case for equitable cognizance, the court would dismiss the bill. *Lewis v. Cocks*, 23 Wall., 469; *Hipp v. Babin*, 19 How., 278. In the former case, the court says: "In the present case the objection was not made by demurrer, plea, or answer, nor was it suggested by counsel, nevertheless if it clearly exists it is the duty of the court *sua sponte* to recognize it and give it effect. It is the universal practice of courts of equity to dismiss the bill if it be grounded upon a merely legal title. In such case the adverse party has a constitutional right to a trial by jury." So in this case a mere action for damages, brought into a court of equity, would deprive the defendant of this constitutional right to a trial by jury. It is just as apparent now, from the allegations of the bill, that the remedy must be confined to the value of the license which may as well be recovered at law as in equity, as it can be after going to the expense of

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taking testimony, and of a hearing in equity. The general allegation of profits accrued, in any practical sense, is manifestly merely colorable, which cannot, in the nature of things, be sustained, and, doubtless, for the purpose of withdrawing the case from a jury and giving jurisdiction to a court of equity. This being so, I can see no reason for not dismissing the bill at this stage of the proceedings, as it must be to the advantage of all parties to take this course.

Since this case was submitted, the District Judge holding the Circuit Court in the District of Tennessee, sustained a similar bill as a bill for an account and discovery, in the case of *Vaughan v. The East Tennessee, Virginia and Georgia Railroad Co.*, 9 Chi. Leg. News, 255. The plaintiff is the same, and it is understood that the bills in the two cases are precisely identical, with the exception of their having been filed against different defendants. The decision in that case is doubtless correct, if the bill presents a proper case for an account and discovery. The learned judge seems to have assumed, without discussion, that the bill does present a proper case for an account and discovery—the very point which, in this case, has been most strenuously combated by the defendant. If I am correct in the views already expressed, the premises upon which the conclusion of the learned judge rests, fail; otherwise, he is right, and I am wrong. The Supreme Court must authoritatively determine the question.

Let the demurrer be sustained, and the bill dismissed.

E. W. McGraw, for the complainant.

M. A. Wheaton, for the defendant.

Zane v. Peck.

JOSEPH ZANE ET AL.

vs.

PECK BROS. & CO.

The patent for a self-closing faucet, granted to Nathaniel Jenkins, June 27th, 1865, was not anticipated by the French patent of Chretien Morand, dated November 14th, 1851.

Where an anticipating device has been changed, so that by the change the thing which is produced is practically a new structure, the new device, though subsidiary to the former one, is patentable.

(Before SHIPMAN, J., District of Connecticut, August, 1877.)

SHIPMAN, J.

This is a bill in equity to restrain the defendants from the infringement of letters patent for a self-closing faucet, which were issued to Nathaniel Jenkins on June 27th, 1865, and which have been duly assigned to the plaintiffs. The defendants admit infringement, and the sole question is as to the novelty of the alleged invention. The validity of the patent has been sustained by decree of the Circuit Court for the District of Massachusetts, in a case where other anticipatory devices than those which are here relied upon were set up in defence. The present defendants are the licensees of the defendants in the Massachusetts case.

The invention consisted in opening a self-closing faucet by means of a quick-threaded screw-follower, the threads of which are inclined at so great a pitch that, when the power to turn the screw is removed, the pressure of the water and of a spiral spring under the valve forces the valve to its seat, where it is held by the pressure of the water. The specification says that another part of the invention consists in combining with the valve and screw-follower a swivel, so that the rotary movement of the spindle shall not be imparted to the valve, which shall have only an axial movement, and thus

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twisting or friction of the valve shall be prevented. This swivel connection of spindle and valve is frequently used in structures where rotation of the valve is not desired. The faucet has gone into extensive use.

The claims of the patent are : " 1. The screw-follower H, in combination with the valve of a self-closing faucet, substantially as set forth, and for the purpose described. 2. The combination of the swivel P, screw-follower H, valve K, and spring O, substantially as and for the purpose described." Self-closing faucets opening by means of a lever, and also by means of a quick-threaded screw, have long been known. The invention in this case is the combination of quick-threaded screw, valve and spring, substantially as described in the specification.

In the pre-existing English patent of Moses Poole, dated April 15th, 1845, and in the specification of William Thomas Cheetham, left with the English Commissioner of Patents, March 14th, 1860, and in the English patent of Thomas Melling, dated October 6th, 1857, no spring was used, and by reason of that omission these devices did not anticipate the Jenkins invention.

The French patent of Chretien Morand, dated November 14th, 1851, is chiefly relied upon by the defendants as anticipatory of the plaintiffs' patent. The Morand device was designed in part to prevent what is called the "water-hammer," or the unpleasant sound which is caused by the reaction of the water when the valve is suddenly closed. The faucet is of two parts, of unequal size ; the induction-way is of larger size than the eduction-way. There are two valves, also of unequal size. The outer valve is in rigid connection with and is turned by a quick-threaded screw-spindle. This valve is so connected with the inner one that the inner valve is guided longitudinally, and is forced to its seat by the same rotation of the screw-follower which operates upon the outer valve. The connection of the inner valve with the spindle is not by means of a swivel-joint. Below the inner valve is a spring, which, with the pressure of the water, causes the valves to be closed when the power that turns the screw is removed. The patentee remarks that

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while he prefers two valves, "it will be understood that in certain cases he can employ but one." The manner in which the faucet will then be constructed is not described. By the use of two valves, the body of water which is between the valves forms a cushion, which checks the force of the sound or of the blow of the water-hammer when the faucet is suddenly closed.

The principal elements which are employed to produce a self-closing faucet—to wit, the screw-follower with a quick-threaded screw, valve and spring—are found in both the Morand and the Jenkins patents; but the double valves of Morand, and the general method in which the mechanism of the inner valve and the spring was arranged, with reference to each other and the water-way, caused his faucet to be cumbersome and lacking in simplicity and economy. It was a contrivance of many parts, and lacked general utility. Jenkins omitted one of the valves, and of course discarded the connection between the two, and made the passage-ways for the entrance and discharge of the water of the same size, and connected the valve and the screw-follower by a swivel, and, generally, materially simplified the construction and arrangement of the valve and spring mechanism. He thus made a simple and economical self-closing faucet, which has gone into general use. He has produced the old result of Morand in a more economical and beneficial manner. The invention of Jenkins is subsidiary to that of Morand; but he has essentially changed the Morand device in such manner that, by the change, the thing which is produced is practically a new structure, and his improved device is, therefore, patentable.

This change was not merely formal, but was, to a certain degree, a structural change and modification of the parts of the Morand faucet, which change required inventive and not merely mechanical skill, and required a sufficient exercise of the inventive faculty to justify the grant of an exclusive right to the use and sale of the article which was produced.

It was not simply the "carrying forward or new or more extended application of the original thought," and was not "a change only in form, properties, or degree." *Smith v. Nichols*, 21 Wall., 112.

Black v. Hubbard.

Let there be a decree for an injunction and an account.

Thomas William Clarke, for the complainants.

Benjamin F. Thurston, for the defendants.

CHARLES N. BLACK ET AL., ADMINISTRATORS,

vs.

JOSEPH B. HUBBARD ET AL. IN EQUITY.

The agent of the patentee authorized H. & Co., for a valuable consideration, to construct a furnace, involving the patent, for use at their tannery. The furnace was constructed there by H. & Co., in pursuance of the license. and the defendants afterward acquired it from them: *Held*, that the patentee, who was the complainant's intestate, had no right or interest in respect to the furnace so built, or to the use of it in the place where it was so built, during the term of his original patent, and acquired none by the extension thereof afterward obtained, and that the defendants, who acquired it from H. & Co., have had and still have the right to use it, clear of any claim for infringement by the patentee or his representatives.

It is a sufficient defence to a suit for infringement, to show that the infringing machine was constructed for use by the defendants or those under whom they claim, with the consent of the patentee, obtained and paid for.

(Before WHEELER, J., Northern District of New York, August, 1877.)

WHEELER, J.

This cause has been heard on bill, answer, replication, testimony, and argument of counsel. In *Bloomer v. Millinger*, 1 Wall., 340, the Supreme Court, in considering the right to use a thing patented, acquired of, or made by authority of the patentee, both during the time of the original and also of an extension of the patent, Clifford, J., delivering the opinion of the court, say: "Patentees acquire the exclusive right to make and use, and vend to others to be used, their

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patented inventions for the period of time specified in the patent, but when they have made and vended to others to be used one or more of the things patented, to that extent they have parted with their exclusive right. They are entitled to but one royalty for a patented machine, and consequently when a patentee has himself constructed the machine and sold it, or authorized another to construct and sell it, or to construct and use and operate it, and the consideration has been paid to him for the right, he has then to that extent parted with his monopoly, and ceased to have any interest whatever in the machine so sold or so authorized to be constructed and operated. Where such circumstances appear, the owner of the machine, whether he built it or purchased it, if he has also acquired the right to use and operate it during the lifetime of the patent, may continue to use it until it is worn out, in spite of any and every extension subsequently obtained by the patentee or his assigns."

In this case it clearly appears, from the testimony of Lewis Rider and Charles North, that Rider was an agent or attorney of the patentee of the invention in question, and that as such agent he authorized Hubbard, Coman & North, in consideration of one hundred and fifty dollars paid, to construct a furnace, involving the patent, for use at their tannery, and that such a furnace was constructed there in pursuance of that license, the use of which at that place is the infringement complained of. Upon the principles stated, applied to these facts, after that transaction, the patentee, Moses Thompson, the orator's intestate, had no right or interest in respect to the furnace so built, or the use of it there, during the time of his original patent, and acquired none by his extension afterward. And those who constructed it under his authority, and the defendants who acquired it of them, have had and still have the right to use it at that place clear of any claim for infringement by him or by the orators who are his representatives. *Wooster v. Sidenberg*, 13 Blatchf. C. C. R., 88. And the construction of the furnace under that authority, although prior to the patent for improvement in bagasse-furnaces, obtained December 15th, 1857, would, according to those principles, as well as by force of the express provisions of the statutes (Rev. Stat.

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U S., section 4899), give the right to use the furnace there against that patent.

It is objected, in argument, that there is not sufficient proof of the loss of the power of attorney to Rider; nor of the written instrument executed by him to Hubbard, Coman & North, to lay foundation for proof of their contents; nor sufficient proof of their contents, if admissible, to show any lawful conveyance of the right to use this furnace. But in the view taken of this case these objections are immaterial. Hubbard, Coman & North may not have acquired the right to use the furnace by lawful conveyance, according to the statutes, of that right, as a subject of conveyance by itself. The defendants do not stand upon such a conveyance. They acquired the right to use it by constructing it for use with the consent of the patentee obtained and paid for. To make out their defence it is only necessary for the defendants to show the construction, with such consent, by competent proof. These are facts that might be proved by any evidence ordinarily competent to prove such facts. The testimony of Rider, when credited, abundantly shows that he was the agent of the patentee, in a general way, to dispose of the right to use the furnaces. This would include the right to part with the monopoly by consenting to the construction of furnaces involving the invention. The testimony of both him and North shows that this furnace was constructed with his consent, given on behalf of Thompson, the patentee, and the consideration for it paid. And the testimony of North further shows that the defendants acquired all the rights of Hubbard, Coman & North in the furnace, which would carry the right to use that furnace there, as long as it should last. For these reasons it is considered that the orators have not maintained any claim against the defendants, as set up in their bill of complaint.

The bill of complaint of the orators is dismissed with costs.

Charles N. Black, for the complainants

William H. Bright and *B. B. Burt*, for the defendants.

American Middlings Purifier Co. v. Christian.

THE AMERICAN MIDLINGS PURIFIER COMPANY

vs.

JOHN A. CHRISTIAN ET AL. IN EQUITY.

Where a patent has been established by a decision of a circuit court, after careful consideration, that decision is entitled to very great weight in a subsequent application, either before the same court or any other, for a preliminary injunction or for any preliminary relief.

The decisions of the Supreme Court upon questions of law govern the decisions of the Circuit Courts, and upon questions of fact arising in the Supreme Court on the validity of a patent, the decision of that court is final so far as the facts were before it, and it is a fair presumption in such cases that all material facts were before it.

The extent of use of an invention by the patentee or the public necessary to sustain an application for an injunction, considered.

When a party has used publicly and notoriously, for any considerable length of time, a patented invention, claiming exclusive right to it, the public are presumed to have acquiesced in that claim.

A patentee, who stands by for a considerable time and takes no steps against infringers of his patents, for the reason that his patents were defective on account of including more than he had really invented, and who, for the purpose of applying for and obtaining reissues which would limit his claims to his actual invention, employs himself during that time obtaining information and making inquiries, so as to prepare himself to sue the infringers, is not guilty of *laches*.

The fact that defendants are well able to pay ultimate damages is not a sufficient ground for the refusal of a preliminary injunction.

(Before MILLER and NELSON, JJ., District of Minnesota, August, 1877.)

MILLER, J.

In the matter of the application of the American Middlings Purifier Company against John A. Christian & Co., we are compelled, this morning, to announce the result of our consultations on it, although, perhaps, very inadequately prepared to do it with perfect satisfaction to ourselves. I must leave to-day, in order to reach the Circuit Court at Denver, Judge

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Dillon not being in attendance at that court, and it will have been in session a couple of days when I get there, in any event, and, under the circumstances, we must give it the best judgment that we have.

The application is for a preliminary injunction in behalf of the plaintiff, upon allegation that the process used in the manufacture of flour, patented by plaintiff's assignor in 1863, and a reissue in 1874, is infringed by the defendants. There is no answer to the bill, and the motion is heard on the bill, on the affidavits of plaintiff, and the affidavits of defendants. The plaintiff brought suit on this same patent in the Supreme Court of the District of Columbia, a year or two ago, against Deener and others, for an infringement of it. In the court of that district the plaintiff failed to establish his case. Upon what precise ground the court below rendered its judgment I do not know, and it is not material. The plaintiff here and the plaintiff there took an appeal to the Supreme Court of the United States, and that case was heard and decided at the last term of court. The decision of the Supreme Court of the District of Columbia was reversed, and a decree was rendered in favor of the plaintiff, in the Supreme Court of the United States. The effect to be given this decree in the present proceedings is one of the main questions to be determined now. The counsel for the plaintiff in this case insists upon treating it as almost conclusive of the validity of the plaintiff's patent. The counsel for the defendants, in their argument, treat it as of very little value in a suit against the present defendant, who is a different party from the defendant in that suit.

I think that the uniform course of decisions in the courts of the United States, where a previous decision has been had by a circuit court with regard to the validity of a patent, has been to treat it as of the very highest nature, and as almost conclusive in an application for injunction in another case founded on the same patent. No one pretends, no one argues, that such a decision, even by a circuit court, is absolutely conclusive on a final hearing on the merits of the case; but, since patents are of such extensive and general

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operation all over the country, and since the litigation in regard to patents has been found so expensive and so wearisome to the courts, it has become almost a matter of necessity, after the validity of a patent, as distinguished from the question of infringement, has been passed upon by a competent tribunal upon a fair hearing, to treat that decision, in any future application in other courts, and against other parties, as strongly persuasive of the validity of the patent ; and this is especially so on the question of a preliminary injunction, and there is reason for it. The decision of the Circuit Court (I am saying nothing about the Supreme Court of the United States), in such cases, is generally—I may add, always, except where there are cases of collusion—the result of careful and deliberate consideration, either of a protracted trial before a jury, or of a careful and full hearing upon depositions before a court. The presumption, therefore, that the title to the patent itself, and its validity (if that were brought in question in one of these suits), was more critically and more thoroughly looked into, and decided upon better hearing and more mature consideration than it can be in a preliminary injunction, is very strong. Therefore, I think I may state it, fairly and correctly, that wherever a patent has been established, even by the decision of the Circuit Court, under a careful consideration, in a subsequent application, either before the same court or any other, for a preliminary injunction or for any preliminary relief, that decision is of very great weight.

This case stands on better ground than that. The decision which is brought to our notice in this case is a decision of the Supreme Court of the United States, the court whose judgments are final upon all questions of patent law ; whether the parties in interest now were before it or not, its decisions as to what is law in the case govern the decisions of all the other courts in the United States. Where the question is one of complicated facts, and the facts may be controverted, and are controverted in the Supreme Court of the United States, with regard to the validity of the patent, of course the decision of that court upon those facts is conclusive, so far as the facts are the same ; and, in addition to that, it is a very

fair presumption that, wherever the validity of the patent is a question which is brought to the attention and consideration of the Supreme Court of the United States, all the questions concerning that patent which could possibly be before the court were before it, and were fully and well considered, and received its full and careful attention. I, therefore, cannot agree with the counsel who has so ably argued this case for the defendants, that the case comes here as though this was the first time the patent was brought before the court.

As regards this particular judgment of the Supreme Court of the United States, it is assailed on the ground, in the first place, that the validity of the patent was but a minor consideration in the case, and did not receive the full and careful attention of the court; and, in the second place, on the ground that the whole suit, from beginning to end, in which that question was decided, was collusive and fraudulent, for the purpose of procuring the judgment of the appellate court in favor of the validity of this patent.

As to the first proposition, that the question of the validity of the patent did not receive the attention of the court carefully, that is refuted at once by the record of the case, and by the opinion of the court. The record of the case shows that it was assailed; that as many as seven or eight different grounds assailing it were set up in the supplemental answer, filed for that very purpose, and it shows that these questions were argued by the counsel upon their briefs, and it shows that the court turned its attention to the questions that were raised in this defence, especially upon that class of objections which go to show the want of novelty—the one that is most relied upon in this case. I may, perhaps, add my personal knowledge of what took place in court, which I do not think I am at liberty to disregard here, although sitting in another court, as to the attention which the whole of this case received. It was submitted to the court on printed argument very early in the term—I should think certainly as early as some time in the month of October; that is my recollection. It was submitted on printed briefs, on both sides, of—taking them together—I should think, five hundred pages. It was held under advisement by the court, before it was decided in

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conference, for two or three months—up to the adjournment just previous to Christmas. It was then decided, and the opinion confided to one of the most careful, laborious and able patent law judges of the United States. He kept that opinion from the week preceding Christmas until the last week of the session of the court, in March. It underwent, undoubtedly, a careful scrutiny and consideration in every branch of it. It is impossible, therefore, under these circumstances, to infer that all there was in the case did not receive the fullest and most careful consideration of the court. There is another thing that shows that it received the consideration of the court. It is possible, in a court like ours, where we are all of one opinion and at one time, that something may have escaped our attention ; but two of the best patent lawyers in that court dissented from the opinion and judgment of the court, as appears by the record. The fact that these judges dissented shows that their objections must have been carefully considered in court, as they were in the conference, and rebuts any suggestion that there was any hasty or ill-advised action in the matter.

As regards the collusion : It is a sad thing to say that perhaps no class of cases coming before the courts have as much fraud, perjury and wicked conduct generally, as patent cases. The vast amount involved in some of them, the conflicting interests, with a variety of people of all classes—the contest between patentees themselves, in which the sums involved are almost fabulous—lead to perjury and fraud of the grossest kind. It is the undoubted experience of the judges who are familiar with patent cases, that there is a large amount of false swearing and corruption in them. It is possible, therefore—our court has recognized the fact in two or three cases coming before it—that there may be a collusive suit brought to our court for the purpose of establishing a patent, in which the control of the litigation is all upon one side, though apparently there is an honest contest between two parties with regard to it. When, therefore, a proposition of that kind is made, it is to be considered. But there is no attempt here to establish a collusion by any affidavits or proof that either of the parties engaged in that case, in the

Supreme Court of the United States, or in the district court, were committing a fraud. There is no attempt, except from the character of the record itself, to show that there was anything but an honest contest in regard to it. The inference that it was a collusive suit is attempted to be drawn from the circumstances, which, I think, are not at all conclusive, and hardly persuasive. One of these is that the suit was suddenly brought, after the reissue of the patent, and speedily carried through the courts. But a reason for that is quite obvious in the nature of the transaction itself. The reissue, on which alone any of these suits are attempted to be sustained, was made at a time which left but five or six years of the patent to run. The parties owning the patent knew—it is now apparent, at least, on these affidavits before me that it was generally known—that the patent would be resisted by a very large and influential body of men. It was nothing, therefore, but sensible, reasonable and proper that the patentee should select the nearest infringer of the patent, and get his case through the courts in a speedy manner, to decide whether he had such a claim, and that is what he did ; and I see nothing indicative of fraud or collusion in the fact. If it could be shown that the defendants selected had no interest in the contest ; that they were not actually engaged in milling at all ; if it could be shown that they made any suspicious bargain with the plaintiff in that case, all these considerations would go to impeach the character of the case ; but, with a single exception, that after the suit had been decided in favor of the defendants below, the parties agreed to some arrangement about the damages which might be recovered, or the mode of settling the amount of damages, if the plaintiff finally succeeded, there is nothing I can see in the case that justifies a suspicion of any collusion or fraud in the matter. I am, therefore, compelled to hold that that decision possesses all the validity, and is entitled to all the respect and consideration, and to all the weight which any other decision of the Supreme Court of the United States could have. And I am not aware—I do not believe—that any case exists or can be found in which an inferior court has held, on an application for a preliminary injunction, that

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the decision of the Supreme Court of the United States establishing the validity of a patent can be assailed in the court below. I do not myself go so far in this case as that. I do not say on this application it could not be shown that a patent was invalid, if the evidence was strong enough to overcome the credit that is due to the judgment of the Supreme Court of the United States. But I say there is no precedent for holding that even that can be done; and I certainly am unwilling, myself, sitting here as a circuit judge, to hold that that decision is of no more weight and character than the decision of a circuit court, which is open to re-examination in the Supreme Court of the United States, which might be carried up there and reversed, and which is made by only one of the judges of an inferior court.

Other considerations are brought to bear in this particular case, conceding the force to be given to that decision by this court, why the injunction in this case should not be granted. The first of these is a statement by counsel for the defendants, that no injunction can be granted, unless there has been proof of previous user of the patent by plaintiff, or parties claiming under the same patent, and it is denied that there is any such proof here. If any very extensive evidence of previous user is an indispensable thing to the granting of an injunction, I am prepared to admit that it is not proven in this case. But I do not understand that previous user is an absolute and indispensable element of granting an injunction. I understand it stands only as one of the means or modes of satisfying the court of the right of the plaintiff to an injunction. It is to be presumed that when a party has used publicly and notoriously for any considerable length of time a patent, claiming exclusive right to it, the public have acquiesced in that claim, and against a man who comes to infringe it and to contest the rights of the plaintiff, there arises a presumption in consequence of that user, which is a very strong one; but does that user afford as strong a presumption as a deliberate contest in a suit through a circuit court and up to the Supreme Court of the United States, of the validity of the patent and the right of the plaintiff to its exclusive use? This is the thing to be established. This is the foundation. If

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this is conceded, or is established, the right of the injunction is clear, whether there is user or not ; and to hold that no injunction can issue without several years' previous user, is, in effect, to hold that if the public combine not to use a man's patent—the general public—or if he can't introduce it into use, or if he can't convince the public that it is a thing profitable to be used, and if it is (as it is in this case) of a thing that he can't, and probably will not, use himself; but is intended for the use of others, in a large measure—why, it would follow, as a matter of course, that he never can get an injunction ; and that his patent may run out and he never can get any value out of it at all, because he has been unable to get anybody to use it. This is particularly applicable with reference to this process patent, because it is a patent, not for a machine, not for a product, not for an article, not for a patent medicine ; it is a patent for a process or mode of doing a particular thing which is being done all over the world. How could he establish a user in this case, unless he himself was able to own an extensive flouring-mill, or to pay somebody to use his patent enough to make it a general user ? I do not think there is anything in that question as applicable to the present case, and especially in view of the fact which I shall now proceed to consider under the second objection, and that is *laches*. In other words, the argument of the defendants is that the plaintiff, having procured his patent in 1863, laid by and took no steps to enforce it against anybody until 1874 or 1875. That argument struck me at first as having a good deal of force in it, and it is founded, if it were true and there is no excuse for it, in very strong principles ; because, if a man has a patent of that kind and he sees the world at large using it for eight or ten years, takes no steps to arrest it, sues nobody, sets up no claim, gives no warning, it is a very natural and strong reason why, under these circumstances, he should not be permitted to come subsequently and arrest everybody by process of injunction. . In each and every case that question depends upon its own facts.

However, it is apparent that, in the original patents issued in 1863, there were defects in the specifications which ren-

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dered them unavailable, in the estimation of the plaintiff, in a suit against anybody who was infringing them, for the reason that they really included the rights of the prior patentees, Cogswell & McKiernan. He, therefore, before he commenced any contest with these parties, who were very numerous and very powerful, was under the necessity of giving up his patents and asking a reissue—not that he might enlarge his claim, as so often is done to the detriment of the public, but, in point of fact, that he might diminish and limit his claims, which he did, being aware that he had to enter into a severe contest, and, therefore, equipped himself by casting off all that might embarrass him, and restricting his patents to that which he thought he could carry, and this he had a right to do, and in this case he was wise. There was, therefore, no laches in that matter, unless during all this time his patents, as they originally stood, were in general use, and in such use as to attract his notice and attention. The affidavits of the defendants remove that difficulty or objection, because, unless we consider the production of farina by a particular process as infringing the patent, the defendants themselves here show, by their own affidavits, that what is called the new process milling commenced in this country about 1871 or 1872, and they assert that, and insist upon it in their own affidavits; so that, supposing the plaintiff in this case to have been vigilant—as vigilant as any man could expect him to be—it was only about 1871 or 1872 that there was any general attempt to use his patent or to infringe it, and then, if you will suppose him to have instituted his inquiries with a view to commence proceedings, it is no great length of time to allow him a year or two to see how far his patent covered those supposed infringements, and how far his patent, as it existed, could be enforced against them. And so, up to the time that he got out his reissued patent, I see no reason to charge him with any laches or negligence in the matter; and it will hardly be pretended, I think, that laches could be imputed to him after that time, because, since he got his reissue of the patent, he selected the nearest and quickest opportunity to bring it to the test of the courts.

The main difficulty and embarrassing part of this case, to

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me and to my associate, is the next question that presents itself, and that is, the endeavor, by affidavits, and exhibits and models, to show, in point of fact, that the patent of the plaintiff was anticipated—that it was not novel, and that it was, therefore, void. In other words, to show that the decision of the Supreme Court of the United States, holding that it was a valid patent, was an erroneous decision, and not, as counsel very courteously says, because it made a mistake in principle, but because there was a defect of the testimony in that case which is supplied in this.

That branch of the subject is embarrassing for two or three reasons. In the first place, I do not pretend—I cannot speak for my associate in that regard—that I am as competent to decide it as some other judges more conversant with patents and scientific principles. In the second place, I have no confidence myself in the impression produced by any number of *ex parte* affidavits of experts. My own experience, both in the local courts and in the Supreme Court of the United States, is that, whenever the matter in contest involves an immense sum in value, and where the question turns mainly upon opinions of experts, there is no difficulty in introducing any amount of them on either side; and yet this class of cases is one in which there is value to be attached to experts. But, if I had time to sit down and examine, one by one, all of these affidavits—most of which, although they are supposed to be treating of patents, only amount, after all, to saying, each of them, “as I understand it, such and such a thing was done,” or, “as I understand it, such and such a thing was not done,” and, “as I understand it, such and such a patent involves such and such a principle, and others do not,” all of which, after all, were only their opinions, although they state them as facts. I say if I had time (and that would require two or three weeks), I might possibly go into this thing and reach an opinion which would, at least, be satisfactory to me, whether that patent was anticipated, and is, therefore, invalid. But I do not feel at liberty, in the face of what the Supreme Court of the United States has decided, after five or six months' deliberation upon these *ex parte* affidavits, which I have not the time to examine fully, to hold, in reference to

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this temporary application, that this patent is invalid ; and that is about all I will say on that subject, because it is all that is necessary to say, since the whole subject will be fully investigated hereafter, when the defendants will have the fullest and fairest opportunity, after they have filed their answer and stated specifically upon what prior use, prior patent, or prior publications they intend to rely, after they have brought them to the test of depositions, witnesses cross-examined, models carefully looked into in the presence of the court, and explained ; after all that, they will have an opportunity to have full justice, and, if they can show that this patent is invalid, as I hold it is not conclusively shown, they will have an opportunity to do it. But I do not now think that I would be discharging my duty to decide, on this hasty hearing, that this class of affidavits which—as I heard them read, and as I have looked into them in my private room—do not satisfy me of the proposition of the defendants, that I was at liberty, because of their number, to hold that this patent is an invalid patent.

There are two other reasons urged, not against this patent, not against the patent itself, but admitting the patent to be a valid patent, why the injunction should not be granted. The first of those is that there is actually no infringement proved ; the infringement is denied by the affidavits, even conceding the patent to be valid. As to that, it is hardly necessary for me to say more than that the defendants themselves creditably and manfully rely upon impeaching the patent, and hardly venture to say that they have not used the process of the plaintiff. Their whole evidence goes to show that they have used, and they insist that they have used a machine which destroys the plaintiff's patent because it antedates it. They themselves have narrowed the question, then, not to one of infringement, but to the validity of the patent. It is manly in them to do so. I have no doubt myself that this is to be the test-case, unless the one already decided is ; and I take the liberty of saying that the cross-imputations of the gentlemen here, about fraudulent misconduct on both sides, seem to me utterly without foundation. The plaintiff has shown himself a worthy foe and a manly one, through

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the whole of this contest. He prepared himself in proper panoply when he went to the Supreme Court of the United States and got his decision, before he attempted to trouble the little mills all over the country. When he has got himself ready for the fight, he selects the advance foe, the party who says, "I own the largest mill in the western world," and who has the assistance of all the other millers, with notice to come and defend his suit. Knowing that fact, the plaintiff selects that very party as the one upon whom he makes his first attack. If he had no faith in his patent, if he had intended to go around and blackmail the smaller manufacturers, he might have hunted up those who couldn't defend, in little out-of-the-way places. He has not done it, and he makes an open battle. Defendants also make a manly defence. Although they say they don't think they have infringed, they come squarely up and say they mean to fight the validity of the patent. They have a right to do it, and they will have it under this decision. I hope this case will prove an exception to the fraudulent devices which have been practised, and that both parties will conduct this suit, hereafter, in that straightforward way which has characterized them both up to the present time.

The defendants also say that, because they are of great ability and amply able to respond to any damages that may be obtained by the final decree, and because their operations are very extensive, and the issue of an injunction would interfere very largely with their business, would be productive of much more harm to them than the refusal of the injunction would be to the plaintiff, therefore, the injunction ought not to be issued.

In regard to the issuing of an injunction, I do not think that the ability of the respondents to pay ultimate damages ought to be *very much* considered in this case. It is a matter worthy of very great consideration that the patent of the plaintiff will expire inside of three years from the date of this present application.

It is very easy for the defendants—very probably the defendants will contest this case so severely that no final decree will be obtained until the patent is exhausted, and it will remain

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a question of very grave doubt whether any decree rendered for damages after the expiration of the patent, unless some preliminary measure has been taken to give validity to it, would cover those damages. It is therefore important, it is absolutely necessary, if the plaintiff has any just claim, that the relief should be granted. It should be such as would enable it, if it finally got a decree, even if it was five or six years hence, to realize the benefit of this litigation. I am, therefore, of the opinion (in which my brother Nelson concurs), that it is our duty to grant the relief asked in this case, subject to a further provision, which has been well considered in previous cases, and which we have a right to apply, and which we propose to apply in this case. And in that view of it the responsibility and ability of the respondents is a great inducement to us to make the order which we propose to make, and that is an order granting the injunction, unless the defendants, within a reasonable time—say such time as is convenient to my brother judge here, ten or twenty days—shall come in and give the bond which has often been required in such cases. In that view of the subject, we think that nobody will be hurt. The defendants are amply able to give that bond.

The bond will be conditioned for the payment of any final decree for money in favor of the plaintiff in this case, and conditioned for their keeping an accurate and faithful account of the amount of flour made by them in their mills with the machines which they admit they use, and for a report of that once every three months to the court, under oath.

I am very happy to be supported in nearly all that I have said, certainly in all that we have decided on this subject, by the case referred to by counsel for defendants, of *Furbush v. Bradford*, 1 Fisher's Patent Cases, 318.

Judge Miller here read from this decision, and after hearing counsel in behalf of the respective parties, said: "Under all the circumstances of the case, we think that a bond for two hundred and fifty thousand dollars will be sufficient; we do not think that will be oppressive. That will be the order."

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Rodney Mason and John B. & W. H. Sanborn, for the complainant.

Gordon E. Cole, H. R. Selden, E. B. Selden and Mr. Gridley, for the defendants.

JAMES W. HERRING ET AL.

vs.

WILLIS S. NELSON ET AL. IN EQUITY.

SAME

vs.

WILLIAM G. GAGE ET AL.

The first claim of reissued letters patent granted to John Deuchfield, January 16th, 1872, for an "improvement in cooling and drying meal," and extended, April 17th, 1872, for seven years from April 20th, 1872 (the original patent having been granted to said Deuchfield, April 20th, 1858), namely, "The arrangement and combination of the suction fan G, and the spout I, with the meal-chest D, receiving the meal from the grinding stones, and provided with a conveyor shaft F, and elevator F', substantially as and for the purpose set forth," is not subject to the objection that it is for a different invention from that for which the original patent was issued, although the original patent claimed only a combination which embraced the elements composing the combination claimed in said first claim with other elements.

The combination of machinery for cooling meal, in the process of converting grain into flour, with machinery for preventing the waste of meal, constitutes a patentable combination, and not a mere aggregation.

A patent for a combination of old elements may be reissued for a combination of fewer elements than were contained in the combination originally claimed.

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The decision in *Gill v. Wells* (22 Wall., 1), explained.

A patent, to be overthrown on the question of novelty, must be overthrown by clear and satisfactory proof.

A rejected application for a patent is not evidence that the thing described was ever used, nor is such description a patent or a publication within the statute.

(Before JOHNSON, J., Northern District of New York, September, 1877.)

JOHNSON, J.

The bills, in these causes, were exhibited by the plaintiffs, as assignees, for the county of Oswego, of certain reissued and extended letters patent originally granted to John Deuchfield, April 20th, 1858, and numbered 19,984, for the term of fourteen years. The letters patent were reissued to Deuchfield, January 16th, 1872, and were extended, April 17th, 1872, for a further term of seven years from the time of the expiration of the original and reissued patent, April 20th, 1872. The defendants are charged with infringing the first claim of the reissued patent. In defence, it is insisted that the reissued letters patent are not for the same invention as the original patent, and that new matter has been introduced into the specification, contrary to the provisions of section 53 of the Patent Act of July 8th, 1870, 16 U. S. Stat. at Large, 205. In the second place, it is claimed that the patentee was not the first inventor of what, if anything, was new in the invention claimed under the first claim of the reissued patent. This position is sought to be sustained by proof, 1st, that some one else made the invention, if any; 2d, by proof of several patents which are claimed to anticipate the Deuchfield patent; and, 3d, by proof of what is alleged to have been the prior use, in various instances, of that which is claimed as the invention of Deuchfield.

The reissued patent, No. 4,712, dated January 16th, 1872, is for an alleged new and useful "improvement in cooling and drying meal," which Deuchfield claimed to have invented. The amended specification annexed thereto states that Deuchfield has "invented a new and improved arrangement of means for cooling and drying meal," and declares the invention to consist in "the peculiar arrangement of a suction fan, con-

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veyor or conveyors, and elevators," as thereafter described, "whereby the meal, during its passage from the grinding stones to the bolts, is thoroughly dried and cooled within a limited space, the whole forming a simple and economical device." The specification is accompanied by lettered drawings, which are referred to in the description: "A represents mill-stones, and A' are the curbs. The stones are arranged in the ordinary way. B represents the bed on which the stones are placed; C represents the spouts which convey the meal from the stones; and D is a chest which is placed horizontally on the flooring, E, and with which the blower ends of the spouts, C, communicate, as shown at *a* in both figures. Within the chest, D, a longitudinal shaft, F, is placed, said shaft having a spiral flanch, *b*, on it, as shown clearly in Fig. 1. The chest, D, is equal in length to the bed, B, so that all the spouts, C, of the several stones, A, may communicate with it. Within the chest, D, there is also placed a zig-zag partition, E, provided with openings, *c*, having slides, *d*; and with one end of the chest, D, elevators, F', communicate, said elevators discharging their contents at *e*, as shown in Fig. 2. G is a fan, which is placed within a suitable box, H. The box, H, communicates with a spout, I, the lower end of which communicates with one end of the chest, D, as shown at *f*. The upper end of the spout, I, communicates with one end of a chest, J, as shown at *g*. The chest, J, contains a longitudinal shaft, K, having a screw or spiral flanch, *h*, on it, as plainly shown in Fig. 1, and, within the chest J, a series of vertical plates, *i*, is placed and arranged, as clearly shown in Fig. 1, to form a zig-zag passage, as indicated by arrows, 1. The end of the chest opposite to that where the spout, I, communicates, is provided with an opening, *j*. Both shafts, F, K, are rotated by any proper means, in the direction indicated by the arrows, 2." The operation is next described, as follows: "The meal passes from the stones, A, down the spouts, C, and into the lower part of the chest, D, and is conveyed by the spirally flanch shaft, F, into the elevator, F', the shaft, F, which is a conveyor, moving the meal in the direction indicated by the arrows, 3. The meal is carried up by the elevators and discharged, at *e*, directly into the bolts

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or into troughs, and may be conveyed by hopper-boys, or any suitable conveying device, into the bolts. While the meal is thus passed through the stones, A, spouts, C, and the chest, D, a suction blast is produced by the fan, G, said blast absorbing the moisture or vapor which the meal contains, and which is heated or warmed by the friction of the stones, A. The meal, therefore, is dried and cooled, and, in consequence of the time consumed during its passage through the spouts, C, and chest, D, will be perfectly acted upon by the blast, so that all free moisture will be absorbed. A portion of the finer and lighter particles of flour will follow the blast, and will be ejected up through the spout, I, and through the serpentine or winding-passage formed by the parts *i*, and will settle in the outer end of the chest, J, and be conveyed by the conveyor or flanged shaft, K, to a spout, *j*, through which it falls into the elevators, F', and unites with the meal which is received by the elevators direct from the chest, D." The specification proceeds: "This compound arrangement for operating on the meal while passing through the chest, D, and on the escaped flour in the chest, J, returning the latter to the elevators, while it is extremely well adapted for large flouring mills running at high speeds and with a strong suction blast, may not be either necessary or even practicable in all cases. When the grinding friction evolves only a moderate degree of heat, the chest, J, and its apparatus, may be dispensed with, for, the blast being moderated to correspond, so small a quantity of the fine flour will be drawn through the spout, I, that such flour may be ejected on the mill floor, and may be disposed of in any convenient way, so as to enter the bolts. I do not claim forcing a current of air between a pair of mill stones, while the same is in operation, for the purpose of keeping the stones in a cool state, and preventing the heating of the grain, for, such means, although not very efficient, have been previously used; but I am not aware that parts arranged as herein shown, so as to allow the meal to be subjected to the blast during its entire, or nearly entire, passage from the stones to the bolts, and insure the perfect drying and cooling of the meal, have been previously used. I claim, therefore, as new, and desire to secure by letters patent,

1. The arrangement and combination of the suction fan G and spout I, with the meal chest D, receiving the meal from the grinding stones, and provided with a conveyor shaft F, an elevator F', substantially as and for the purpose set forth; 2. The arrangement and combination of the chests D, J, shafts F, K, elevators F', fan G, and spout I, substantially as and for the purpose, herein shown and described."

The specification annexed to the patent as originally issued April 20th, 1858, differed in some respects from that attached to the reissued patent. In the original, Deuchfield declares himself to have invented a new and improved arrangement of means for cooling and drying meal *during its passage from the grinding stones to the bolts*, the underlined words being omitted in the reissue. In the original it is declared that the invention consists in the peculiar arrangement of a suction fan, conveyors and elevators. The reissue, by the insertion of the word "conveyor," in the singular, is made to read "conveyor or conveyors," and thus the way is prepared for the omission of one feature of the combination originally claimed. This severance of the combination is further prepared by the paragraph of the reissued specification, commencing with the words, "This compound arrangement," and ending with the words "enter the bolts." The proposed severance is consummated by the insertion of the first claim, under which, as framed, are claimed only "the arrangement and combination of the suction fan G and spout I, with the meal chest D, receiving the meal from the grinding stones, and provided with a conveyor shaft F, and elevator F', substantially as and for the purpose set forth." The other and original claim, now the second, embraces the arrangement and combination of both chests D and J, both (conveyor) shafts F and K, and the elevators, fan and spout connected therewith, substantially as and for the purposes therein shown and described. Under the patent as originally issued, it is, therefore, quite plain, that no infringement could be made out without showing a use of the complete combination, with all its elements, for, that was the thing patented. No device was claimed as the invention of the patentee, which entered into the combination. The invention claimed consisted only in the combi-

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nation, and, in this sense, at least, it is true, that, in such a case, the combination disappears when any element is omitted, as was said by Mr. Justice Nelson in *Vance v. Campbell*, 1 Black, 427, and as since has been frequently repeated.

Under the first claim of the reissued patent, if it be valid, an infringement may be made out by showing a use of the combination specified in that claim, which omits a number of elements combined in the second or original claim. Under the first claim, therefore, the operation of the reissued patent is greatly enlarged beyond that of the original patent. It, according to its terms, entitles the patentee to exclude everybody from using the combined elements of that claim; while the original claim would be effectual only to exclude the use by others of the elements of the first claim when combined with the other elements of the original claim. The learned counsel for the plaintiffs is, therefore, in error when he contends that the change produced by the introduction of the first claim of the reissued patent is a narrowing of the claims of the patentee, by abandoning to the public the use of a part of that which, under the original claim, was secured to the patentee. Such is not the operation or effect of that which has been done by the alteration of the specification. Under the original claim, two things were necessary to an infringement, each of which was expressed in the single original claim. Under the reissue and its first claim, one only of those two things being done works an infringement. So that the enlargement is of the right of the patentee; the narrowing is of the right of the public.

It is further claimed, on the part of the plaintiffs, that the claim under the original specification was not of a true combination, producing a result from the co-action of the elements, but that the results were the consequence of the successive and independent action of the parts, each producing its own result. In a certain sense, this would seem to be true; because, the cooling of the meal may be conceived of as one independent result, and the saving and restoring to the common mass that part of the meal which, in the cooling process, has been mechanically separated from the rest, may, also, be conceived of as another independent result. But this, in

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my opinion, is an over-refinement, not required by the principles of the patent law. When regarded as part of a practical improved arrangement of means for converting grain into flour, both results, the cooling and the saving, contribute to the one common result—cooling without waste, and thus getting the largest practicable amount of merchantable flour. It cannot be doubted, that, if the whole process of reducing grain to flour were new, the complete machinery employed, even including the combined Deuchfield device, could be included and maintained in a single patent, or in a single combination. This view is, as I understand it, supported by the decision of Mr. Justice Curtis, in *Forbush v. Cook*, 20 Law Reporter, 664, cited in Curtis on Patents, § 111, note 2. The learned Judge says: "To make a valid claim for a combination, it is not necessary that the several elementary parts of the combination should act simultaneously. If those elementary parts are so arranged that the successive action of each contributes to produce some practical result, which result, when attained, is the product of the simultaneous or successive action of all the elementary parts, viewed as one entire whole, a valid claim for thus combining those elementary parts may be made." In the original arguments on the part of the plaintiffs, the combination was sought to be sustained as a patentable combination; but, in the further argument, the attempt is made to treat this arrangement of means claimed in the original patent, and in the second claim of the reissued patent, as not patentable, upon the ground that it constitutes only an aggregation of several results, within the doctrine of *Hailes v. Van Wormer*, 20 Wallace, 353, 368, and *Reckendorfer v. Faber*, 2 Otto, 347; but, what has been already said on that topic seems to me to be sufficient to show, that the combination for which the original patent was granted was not liable to the objection, that the results of the combination were an aggregate of separate results, and not the joint product of the several elements of the combination. The case is one not of juxtaposition merely, but of combination, in the sense of the law.

The next question to be considered is that which arises upon the consideration of the two patents, with their speci-

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fications and drawings—whether the reissued patent is for the same invention as that for which the original was issued, and thus within the authority of the Commissioner of Patents, under section 53 of the Patent Act of 1870. That the original patent was inoperative or invalid, by reason of a defective or insufficient specification, or by reason of the patentee claiming, as his own invention or discovery, more than he had a right to claim as new, and that the error arose by inadvertence, accident, or mistake, and without any fraudulent or deceptive intention, has been conclusively established by the action of the Commissioner, to whom alone the decision of these questions belonged. *Seymour v. Osborne*, 11 Wall., 516, 543 to 545. But, this decision leaves undetermined the question whether “there is such a repugnancy between the old and the new patent, that it must be held, as matter of legal construction, that the new patent is not for the same invention as that embraced in the original patent.” I purposely omit the additional word used in the decision cited, which says, “embraced and secured in the original patent,” because, one of the very plain grounds of reissue specified in the statute is, that the original patent fails to secure the invention, by reason of the imperfection of the claim or description of the invention. Curtis on Patents, § 282 b, note 1, and cases there cited. Moreover, the statute, in the section cited, allows the new patent to be issued with corrected specifications, and, in case of a machine patent, reference to be had, for this purpose, to the drawings and model, the only prohibition, in that behalf, being, that they may only be amended by each other. There is, also, a general prohibition, that no new matter shall be embraced in the specification. A further provision is made, that, where there is neither model nor drawing, amendments may be made upon proof satisfactory to the Commissioner that such new matter or amendment was a part of the original invention. It results, from these provisions, taken together, that what is found in the specification drawing or model of the original patent may be embraced in the reissued patent (*Seymour v. Osborne*, 11 Wall., 516); and that, in redescribing his invention, the patentee is not rigidly confined to what was described before, but may include in the new descrip-

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tion whatever else was suggested or substantially indicated in the old, provided it was embraced in the invention as actually made and perfected. Differences in the description and claims of the old and the new specifications are not the tests of substantial diversity, but the description may be varied, and the claim restricted or enlarged, provided the identity of the subject-matter of the original patent is preserved. Within this range, whatever change is required to protect and effectuate the invention is allowable. *Parham v. Am. Bulttonhole Co.*, 4 Fisher's Pat. Cases, 468 ; *Battin v. Taggart*, 17 How., 74. In the case of *Stevens v. Pritchard*, 10 Off. Gaz., 505, Mr. Justice Clifford has stated the doctrine with great clearness and precision, so as to afford a plain guide in the application of the law as to reissues. The learned Justice says : " Re-issued patents are presumed to be for the same invention as the original, unless the contrary appears. Matters of fact are not open under such an issue, in a suit for infringement. Instead of that, the conclusion in such case must always be in favor of the validity of the reissued patent, unless it appears upon a comparison of the two instruments that the reissue, as matter of legal construction, is not for the same invention as the original. Surrenders are allowed in order that what was imperfect before may be made perfect, and in order that what was before ambiguous may be made clear and certain ; and for that purpose the patentee may add whatever was substantially suggested or indicated in the original specifications, drawings, or Patent Office model. New features may not be introduced, for the reason that every interpolation of the kind is forbidden by the act of Congress. Errors and defects may, however, be corrected under the conditions specified ; and the prohibition, that new features shall not be introduced must not be understood as taking away the right to include in the reissue whatever was substantially suggested or indicated in the surrendered specifications, drawings, or Patent Office model." In the case now before the court, the drawings attached to the reissued patent are the same as were annexed to the original. The mechanical structure, so far as the machine comes under the first claim of the reissue, is exactly the same as was described in the

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original specification, up to that point. Nor is anything added to the description of the further mechanical structure of the machine, as originally described. Looking at the mode of operation of the machine as set forth in the original specification, the reissued patent makes no alteration in it, so far as the machine falls under the first claim of the reissue. The whole controversy upon the question turns upon this. The mechanical arrangements are all unchanged; the mode of operation of the several parts is correctly described; the results of the action of the whole are correctly stated; and it is obvious, that, while the combined action of all the parts produces the complete result, yet the mere cooling and drying of the meal is the result of that part of the machinery which is now covered by the first claim of the reissued patent. All that has been added is the new claim, which embodies in words that which the specifications and drawings could not fail to disclose to any intelligent examination. The verbal addition to the specification, of the paragraph which declares that the collection of the separated fine part of the meal and its return to the general mass may or may not be made, as circumstances make desirable, is not, in my opinion, new matter, within the prohibition of the statute. If, to the original specification, only a new claim had been added, substantially like that which forms the first claim of the reissued patent, the legal effect of the original patent would have been the same as that now asserted for the reissued patent. The remarks with which Mr. Justice Clifford commences his opinion, in the case, already cited, of *Stevens v. Pritchard*, I think, substantially sustain this view. The learned Justice says: "Cases arise where a patentee having invented a new and useful combination, consisting of several elements, which in combination, compose an organized machine, also claims to have invented new and useful inventions, consisting of fewer numbers of the same elements, and in such cases the law is well settled that, if the several combinations are new and useful, and will severally produce new and useful results, the inventor is entitled to a patent for the several combinations, provided he complies with the requirements of the Patent Act, and files in the Patent Office a written descrip-

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tion of each of the alleged new and useful combinations, and of the manner of making, constructing, and using the several inventions. He may, if he sees fit, give the descriptions of the several combinations in one specification, and in that event, he can secure the full benefit of the exclusive right to each of the several inventions by separate claims, referring to the specification for the description of the invention, without the necessity of filing separate applications for each of the inventions. Separate descriptions of the respective inventions in one application are as good as if made in several applications; but the claims must be separate, and it would follow that if the patentee, by inadvertence, accident, or mistake, should fail to claim any one of the described combinations, he might surrender the original patent and have a reissue not only for the combinations claimed in the original specification, but for any which were so omitted in the claims of the original patent." For this proposition is cited as authority the case of *Gill v. Wells*, 22 Wall., 24. It is mainly upon what is said in that case that the defendants rely to sustain their proposition that the reissued patent is void, as not for the same invention as the original patent. The position is this, that, where a patent is for a combination of old elements producing a new and useful result, the invention consists only in the combination, and, therefore, when one element is relinquished, the combination being gone, the invention is gone likewise. This proposition is, in a certain sense, true and accurate, in reference to a patentee of such a combination bringing an action for an infringement. There is no infringement when all the elements are not employed, leaving out of view the consideration of equivalents, which, for the present purpose, is not material. Numerous cases sustain this view, and the law is unquestioned. *Vance v. Campbell*, 1 Black, 427; *Prouty v. Ruggles*, 16 Peters, 336; *Gould v. Rees*, 15 Wall., 187; and many other cases. But, upon the doctrine of these cases, in respect to actions for infringements, it is sought to establish a distinction between patents for combinations of old elements and all other patents, in regard to reissues, and to deny the power to reissue such a patent for a combination of any fewer elements than were contained

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in the original combination. Now, the Patent Act makes no such distinction. Its terms are general and relate alike to all patents. The position is set up and rests upon this argument: The reissue must be for the same invention; this consists in the combination, which disappears when one element is omitted. But, this argument, true or unsound, does not apply to a case in which, among the old elements, some are single and some are sub-combinations, entering into the general and larger combination. This doctrine was necessarily affirmed, because acted upon in judgment, in *The Corn Planter Patent*, 23 Wallace, 181. To the opinion of the majority of the Supreme Court in that case was opposed the able statement of the learned judge who delivered the opinion of the court in *Gill v. Wells*, 22 Wall., 1, of the grounds on which he had, in that case, maintained the view that is now sought to be applied to and to control the decision of the present case. But the majority of the court did not apply those views to the decision of *The Corn Planter Case*, but held that the reissues were for things contained within the machines and apparatus described in the original patents, and were, therefore, not subject to the objection of diversity of invention.

In *Gill v. Wells* (above cited), the reissues omitted one well described ingredient of the patent combination, and substituted in its place several other devices, not equivalent for the omitted element, nor claimed to be such, and the court held that this was inadmissible, and that the reissues were not for the original invention.

The case of *Vance v. Campbell* (before cited), does not, as a judgment, settle any doctrine material to the question of reissues. There was no reissue in the case, and the decision granting a new trial was put upon the ground that the plaintiff had been improperly excluded as a witness.

In *Russell v. Dodge*, 3 Otto, 460, the only point decided was, that the alleged invention or inventions contained in the original and reissued patents lacked novelty, and were, therefore, not patentable.

After a careful examination of all the cases which have been cited, I am of opinion, that, upon a comparison of the

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original and reissued patents, it cannot be held, as matter of legal construction, that the reissued patent is for an invention not contained in the original patent, and that the reissued patent is, therefore, not void upon that ground. The decision of the Patent Office in granting the reissue covers the grounds of fact upon which the action of the Commissioner could, in the proceedings before him, have been contested.

The reissued patent being valid upon its face, the presumption is, that the patentee was the first inventor of that which the patent purports to secure. *Scymour v. Osborne*, 11 Wall., 516; *Tucker v. Tucker Man'g Co.*, 10 Off. Gaz., 464, Clifford, J. And this is not a mere formal presumption, but, if to be overthrown by parol testimony, must be overthrown upon clear and satisfactory proof. A case of doubt upon the evidence is not enough, for that leaves the presumption operative. *Brady v. Atlantic Works*, 10 Off. Gaz., 702.

The prior patents adduced by the defendants to show an anticipation of the plaintiffs' invention do not appear to me, in their principles and modes of operation, to approach near enough to the plaintiffs' invention to require particular comment. No one of them shows a current of air created by a suction fan, and drawn through the opening of the mill stones, down the meal spouts, and into and along the enlarged meal box shown in the drawings, and the conveyor shaft, and accompanying the meal in its progress to the elevators, and, by its operation, taking away the heat and moisture of the meal, which is the substance of the plaintiffs' invention.

The rejected application of Mann for a patent is not to be considered as a bar to the patent represented by the plaintiffs. *The Corn Planter Patent*, 23 Wall., 181. Assuming its similarity to the Deuchfield device, the rejected application does not make out that the thing described was ever used; nor is such a description a patent or publication, within the statute.

The defence of want of novelty, by reason of the alleged prior invention by one Stryker, does not appear to me to have any serious basis. The story which he tells of Deuchfield's application to him, at a grocery store, on a Sunday evening, February 1st, 1857, to contrive some way of keep-

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ing the mill (the Uhlhorn) dry, that, after a brief conversation, Deuchfield employed him to come on the next day, to begin the work, and that, on the Monday morning, he went to the mill and made the drawing which he produces, dated and signed by him on that day, as he testifies, and then proceeded with the work, having, as his guide, this working drawing, which represents the mill as having five run of stones, while, upon the overwhelming proof, it never had but four, makes a story incredible enough, upon the face of it, to be disbelieved. But, it is shown to be necessarily untrue, by the evidence of several persons with whom Deuchfield had previously conversed respecting a plan which he had devised for drying the meal and thus freeing the mill from the injurious effect of moisture, and, also, by his consultation with the owners of the mill, and the final consent on their part that he might proceed to put in the contrivance which he had devised, as he proceeded to do on the 2d of February, 1857, employing Stryker for the purpose. It is true, that Deuchfield was not called as a witness, but the proof shows that he was a man broken in health and aged at the time of the examination, and, as there was other independent proof upon the point, satisfactory in character, the omission is not material. It only calls for close scrutiny of the question.

The other questions of anticipation rest upon oral proof, either of the time when certain contrivances were introduced into particular mills, or of the substantial identity of such devices with that covered by Deuchfield's invention.

I am satisfied, upon the most careful examination which I am capable of, that, in each case, the weight of the oral evidence is with the patentee, and that, without the presumption arising from the patent, I should be constrained to hold, upon these questions, with the plaintiffs. But, I can with difficulty understand how it can be supposed, that, in any of the cases of alleged anticipation, the proof for the defence can be taken to go beyond a case of doubt; and, in such a case, the presumption arising from the patent must stand. To discuss these several questions in detail can be of no public service, and I have not the time to devote to it.

The infringements by the defendants are clearly made out

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by the testimony on the part of the defendants, as well as by that of Bignall on the part of the plaintiffs. In each case, the first claim of the reissued patent is infringed by devices, in all material respects, like those contained in the reissue, and embracing all the elements of that combination. That the defendants have added something to the devices combined by the patentee does not enable them to use his combination without being answerable.

A decree in favor of the plaintiffs must be made in the usual form, restraining further infringement, establishing the reissue, and directing a reference to a master to take an account and ascertain the profits made by the defendants, and the damages suffered by the plaintiff, by reason of such infringements. Either party has leave to apply for further directions, and, upon the coming in and confirmation of the master's report, for a final decree.

George F. Comstock and James A. Allen, for the complainants.

Henry R. Selden, for the defendants.

ISAAC EPPINGER

vs.

HENRY A. RICHEY ET AL. IN EQUITY.*

The letters patent granted to Isaac Eppinger, June 17th, 1873, for an "improvement in plug and bunch tobacco," are valid.

The claim of said patent, namely, "Plug or bunch tobacco made as herein described, the same consisting of a rope or strand composed of a sweetened or prepared filler inclosed in a binder, in turn enveloped in a wrapper, the said rope being coiled around a central core forming a continuous part of the rope, and the bunch thus made being subjected to a pressure, as and for the purposes set forth," claims a patentable invention.

The peculiarity of the invention is in the form and shape of the coil, and the change required invention, and the article produced is a new and useful article of manufacture.

(Before SHIPMAN, J., Southern District of New York, September, 1877.)

* 14 Blatchf. C. C. R., 307.

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SHIPMAN, J.

This is a bill in equity to restrain the defendants from the infringement of letters patent, dated June 17th, 1873, for an "improvement in plug and bunch tobacco." The infringement is admitted. The novelty of the alleged invention and its patentability are denied.

Licorice, or some other moist and sweet substance, is used in the manufacture of plug or bunch chewing-tobacco, in order to impart moisture and sweetness to the manufactured article. The preservation of these two qualities is greatly desired by the consumer. When tobacco is thus prepared, there is danger that the moist tobacco, if exposed to the air, will ferment, or will mould and "dry rot." It is, therefore, important to make the plug or bunch as compact as possible, in order to preserve moisture and to prevent mould. Before the date of the invention, this kind of chewing tobacco was made by enclosing strands of sweetened "filler" tobacco in a binder. The wrapped tobacco was then spun upon a wheel, or twirled or rolled by hand into a roll, and, after being encased in a wrapper, was coiled and packed for market, or was subjected to extreme heat, and afterwards to pressure, before being put up in packages. Moisture was removed by this "hot house" process, and thus danger of fermentation was obviated, but the quality of the tobacco was made inferior. Another method of manufacture was by encasing the sweetened filler strands in an unsweetened binder, and, also, in a wrapper. The rope was then bent and braided, and the two ends of the braid were fastened by a cap of wrapper tobacco. The braids were subjected to sidewise pressure, but could not be subjected to pressure endwise, in consequence of their shape, and, therefore, were not compressed sufficiently to exclude the air, and the tobacco was liable to become mouldy. Each braid soon became quite dry in the pocket of the consumer, and lost its flavor.

The patentee gives, in his specification, the following description of the patented improvement. "My improved mode of manufacturing plug or bunch tobacco, of the kind above stated, consists in forming the strand of 'filler' tobacco, which is treated with licorice or other sweetening

substance, in the usual manner. I envelop this filler in a 'binder,' which is a brighter and larger leaf, and around the binder I wrap what is called a 'bright wrapper leaf,' which is used in its natural condition, without treatment. The rope thus formed is, in fact, a long flexible cigar, with a sweetened filler. It is dry and clean on the exterior, the binder effectually isolating and separating the filler from the exterior wrapper. It does not require to be sweated, and it can be shipped and transported for long distances by water or land conveyance, without danger of moulding or spoiling. The wrapper is of little use for chewing purposes. Therefore, in order to make good chewing-tobacco, the filler and binder should be of such proportions to the wrapper, that, while the wrapper will suffice as a protector and preserver of the filler, there will be no appreciable loss in the plug or bunch, for chewing purposes. In Figure 1 is shown a rope or strand such as I have described, *a* being the filler, *b* the binder, and *c* the wrapper. The rope or strand thus made is coiled into a bunch around a central core, one end of the rope, either single or doubled, serving for the core, and the remainder of the length being coiled around this coil, as represented in Fig. 2, the central core *d* and external coil *e* being thus in one piece, and constituting part of the same continuous strand or rope. The coil or bunch thus made by hand is not, however, completed, nor is it fit for sale or use, being loose and unfinished in appearance and condition. The next step is to finish it, which is effected in the polishing-pot or finisher—a strong receptacle of suitable shape and size to contain a number of plugs, provided with a follower forced down upon the plug or plugs in the pot by hydrostatic pressure or other sufficiently powerful agency. The bunches are first placed in the pots on end, and the follower is then forced down with great pressure upon them. After being allowed to set for about twenty minutes, the follower is removed and the bunches are taken out and replaced in the pot on their sides, and side by side, and pressed again in like manner. They can then be pressed on their edges, but this, however, is optional, and not absolutely necessary, as the two pressings have compacted and solidified the plug sufficiently for all ordinary purposes.

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The plug thus compacted is represented in Fig. 3, and is ready for packing. In conclusion, I wish to state that I do not here broadly claim plug or bunch tobacco put up in coils with a central core and then subjected to pressure; nor do I claim, separately, the combination of a filler, binder and wrapper." The claim of the patent is for "plug or bunch tobacco made as herein described, the same consisting of a rope or strand, composed of a sweetened or prepared filler, inclosed in a binder, in turn enveloped in a wrapper, the said rope being coiled around a central core, forming a continuous part of the rope, and the bunch thus made being subjected to a pressure, as and for the purposes set forth."

The advantages of this improved or new article of manufacture are very marked. The moisture of the tobacco is preserved. Air and dampness are excluded by the compactness into which the tobacco is pressed. It can be shipped to warm or damp climates without liability to deterioration by mould, and a single coil can be carried in the pocket of the consumer without becoming dry or friable. The article has had a very large sale, and has commanded a much higher price than the same quality of tobacco when put up in any other form. The price of the patented article has been 51 or 52 cents per pound, exclusive of Government tax, while the same qualities of twist or braid tobacco are sold at 27 cents per pound, exclusive of tax. The utility of the article is indicated by its remarkable success as an article of merchandise—a success which is not attributable to the quality of the tobacco of which it is composed, or to the novelty of the style of manufacture, but to the inherent advantages which it possesses in the particulars which have been mentioned.

The novelty of the invention was clearly proved. It manifestly differs from the ordinary spun or rolled plug tobacco in this, that, in such tobacco, the filler and binder are rolled together, while in the patented article the binder simply encircles the filler. "Twist," or "braid" tobacco was made in the same manner as the patented article is made, by encircling the sweetened filler with two separate wrappings of unsweetened tobacco, but twist tobacco is simply braided and subjected to lateral pressure. Each plug is a flat braid, into the

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interstices of which air freely enters, and, having a comparatively thin and flat surface, the plug cannot be made compact by endwise pressure. The shape and the method of the formation of the coil, which render endwise pressure practicable, and which enable the coil to be compactly compressed without injury to the strands of the filler, constitute the particulars in which the patented article differs from braid tobacco.

The important question which arises in the case is as to the patentability of the invention. A rope of strands of sweetened filler, inclosed in a binder, which in turn is enveloped in a wrapper, antedated the patent, and is disclaimed. Plug tobacco had always been coiled and braided in various forms and had been subjected to pressure. The peculiarity of the invention is in the form and shape of the coil. Can any particular method of coiling, although both endwise and side-wise pressure are thereby made available for the purpose of excluding air, and although the method enables the consumer to use the whole coil in its desired state of moisture, be the subject of a valid patent? The argument of the defendants' counsel is, that the combination of filler, binder and wrapper is old and is disclaimed, which is true; that subjecting a coiled rope of such tobacco to pressure is old and is disclaimed, which is true; that coiling or twisting a moist rope of tobacco has always been practised, which is, also, true; that the particular form of the coil is a matter of fancy; and that the form of the coil cannot involve the exercise of the inventive faculty. This is the precise question which is at issue.

The article of plug tobacco has been long in use, and has been in constant demand. As it has been prepared for market, it has been liable to spoil in warm and damp weather, and to grow mouldy in any temperature. It is fair to presume that the ingenuity of tobacco manufacturers, and of tobacconists, has been exercised in an attempt to find a remedy for this liability to pecuniary loss. The evils were notorious, but no remedy was found until this invention was made. If the remedy consists in the shape of the coil, and if the particular twist of the coil requires no greater exercise of the inventive faculty than is involved in the shape

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of a bow into which a ribbon may be twisted, it is strange that an evil which had long existed had not previously been avoided. Two facts exist in this case. One is, that an important improvement has been attained. The second is, that the improvement is in a staple article, which has been manufactured in this country for a long series of years. Without the testimony of the patentee and the first manufacturer in regard to the number of experiments which were required before the invention was hit upon, and in regard to the difficulty which was experienced in perfecting the manufacture, it is manifest, from the length of time during which tobacco has been manufactured, from the constant demand for it, and from the well-known evils to be overcome, that the inventive faculty must have been brought into exercise, or else that mechanical skill would long since have avoided any danger of fermentation or mould. The utility of the patented article has been evinced by its large sales, and by the unanimity with which rival tobaccoists have commenced its manufacture. The inventor evidently gave to the public an article which it wanted, and which it had not previously known. Without giving to the general use of the invention, as a test of its patentability, any greater importance than the Supreme Court, in the case of *Smith v. Goodyear Dental Vulcanite Co.*, 3 Otto, 486, indicate should be given to this circumstance, I am of opinion, that the facts in the case fully establish the conclusions, (1), that, however simple the change in the method of manufacture apparently may have been, yet it was a change which required invention for its accomplishment; and (2), that the improvement resulting from the changed method of manufacture has been so great, that the article which it produced is, within the meaning of the Patent Acts, a new and useful article of manufacture.

Let there be a decree for an injunction and an account.

Benjamin F. Lee, for the complainant.

Samuel J. Glassey, for the defendants.

THE GOULDS MANUFACTURING COMPANY

vs.

JOHN P. COWING ET AL. IN EQUITY.*

In *Goulds M'fg Co. v. Cowing* (12 Blatchf. C. C. R., 243), it was held, that the invention covered by the plaintiff's patent was of an improvement in a pump, and that, as the plaintiff had failed to show the profits or damages arising to the defendants from the use of such improvement, it was entitled to only nominal damages. On further evidence being given, showing that, after the plaintiff's pump had been introduced into certain oil regions, other pumps could not be sold in those regions: *Held*, that such further evidence did not show that the plaintiff was entitled to other than nominal damages.

(Before JOHNSON, J., Northern District of New York, September, 1877.)

JOHNSON, J.

This case comes up on exceptions, taken by the defendants, to the report of the master under the interlocutory decree, directing an account upon the infringement of the plaintiff's patent. This decree was made in March, 1874, Judge Woodruff presiding. Under it an account was taken before Mr. Pomerooy, acting as master. Upon his report exceptions were taken by the defendants, which were heard before Mr. Justice Hunt. The learned judge allowed the exceptions, and, in the first instance, ordered that the plaintiff was entitled only to nominal damages, but subsequently allowed the plaintiff a further opportunity to produce evidence. Upon the decision of the case, an elaborate opinion was delivered, which is to be found in 12 Blatchf. C. C. R., 243. It was held, that the invention was one only of an improvement in the pump, and not of the entire pump; that numerous parts of the pump were in general use prior to the patent, and were not claimed therein, and were free to be used by the defendants; that the patented invention claimed was a special construction of a

* 14 Blatchf. C. C. R., 315.

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side chamber, whereby the same was adapted to use with the valve casings bolted on the outside ; and that the damages could not exceed the profits upon such improvement. It was further held, that, as the plaintiff failed to show the profits or damages arising from the use of the improvement, the master should have decided that nominal damages only could be recovered. This decision furnishes the law of this circuit upon the questions involved, and, in an especial sense, it furnishes the law of this case, which no judge has a right to review or modify, except upon appeal. Being convinced of its correctness, I have as little inclination, as I have right, to depart from it. Upon the further reference, the report upon which is now before the court, on exceptions taken by the defendants, the clerk of this court, acting as master, has made substantially the same report as was made by the first master, founding his decision upon proof that, after the plaintiff's pump had been introduced into certain oil regions, other pumps could not be sold in those regions. This is relied upon as taking from the former decision all its force, and absolving the party from the necessity of giving proof; as that decision holds, of the profits or damages arising from the use of the improvement. The force of the former decision cannot thus be avoided. The fact newly introduced has no bearing upon the question, but leaves the rule announced in the former decision of Mr. Justice Hunt, uncomplicated with. The attempt to get rid of that decision in this way must necessarily fail. To a court which has decided that evidence of a particular fact is necessary, it is no answer to say that it cannot be given. The consequence of that state of things is, that the party on whom the burthen rests must fail. This is the situation of the plaintiff in the case before the court. It has not given the evidence which the court has held it must give, to entitle it to more than nominal damages. This must be attributed to the impossibility of proving any damages within the rule laid down by the court. The exceptions must be allowed, and the report reduced to nominal damages, and there must be a final decree on that basis. If the views of the plaintiff are to prevail, the only remedy is in the Supreme Court, upon appeal. To the deci-

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sion of Mr. Justice Hunt heretofore made in this cause, is now to be added the decision of the same learned judge, made in this court, in *Black v. Munson*, 14 Blatchf. C. C. R., 265, in which the same doctrine laid down by him in this case is reaffirmed and applied to the circumstances of *Black v. Munson*. Let there be a decree for the plaintiff, with nominal damages only.

J. B. Perkins, for the complainant.

Elisha Foote, for the defendants.

THE ADAMS & WESTLAKE MANUFACTURING CO.

vs.

THE SAINT LOUIS WIRE GOODS CO. IN EQUITY.

The improvement in sieves for which Letters Patent No. 106,597 were granted to Robert J. Mann, August 23, 1870, and of which the complainant is the owner, being construed by the court to consist in a combination of the hoop and sieve cloth, when the edge of the sieve cloth is clasped in the hoop and there fastened by *swaging*: *Held*, that the patent is not infringed by making a wire sieve connected with the rim, which is fastened by what is known as *double-seaming*, inasmuch as double-seaming is a mode of fastening known long before the date of the patent.

On a motion for a preliminary injunction, the court may consider certain matters independent of the affidavits, such as general principles supposed to be known to every one of ordinary intelligence.

The design patent No. 4637, granted to Robert J. Mann, February 7th, 1871, for a flaring rim for sieves, whereby they will nest together, possesses no novelty, even if it were a design which would properly come within the patent law.

(Before TREAT, J., Eastern District of Missouri, September, 1877.)

This bill was brought to restrain the alleged infringement of Letters Patent No. 106,597, dated August 23d, 1870, for improvement in sieves, and Letters Patent No. 4,637, dated

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February 7th, 1871, for design for sieves, both granted to Robert J. Mann.

TREAT, J.

I have received a note from counsel for plaintiff, in which they desire the result of the action of the court to be certified to them. I have not had time to write an opinion in this matter. But as this case has been presented in a hurried way, as the court was very much occupied at the time, and as it will come up hereafter on its merits, I will merely state the conclusions so far as this motion is concerned.

The claim in the patent is for :

"The combination of the hoop A and sieve-cloth C when the edge of the sieve-cloth is clasped within the hoop and thus fastened by swaging, substantially as and for the purpose specified and shown."

Without going into an elaborate disquisition with regard to these matters, it must suffice that this patent has been twice established as a valid and subsisting patent, and for the purposes of this motion must be so treated by this court.

Thereupon, only one inquiry is presented : Is the sieve, as used by defendant, an infringement thereon ?

If we go through the mechanical combination involved in their use by the defendant, and into the mechanical combination for which the plaintiff, as assignee, has a patent, we will find, according to the claims of the patent, the essential element is, that the sieve is placed into proper position with regard to the hoops, and swaged, which results in tightening the sieve below, and produces this convenient effect in the form indicated, whereby the rim remains, so that the plaintiff's sieve, thus produced, may effect results which sieves of this character are intended to produce. Now, plaintiff does not claim, and cannot claim, that the wire sieve is, simply in connection with the rim, patentable, because both of those things existed anterior to his patent.

What, then, is his patent ? It is that, in connection with a metallic rim, he produces a curve by swaging, which works out the results here shown. On the other hand, defendant takes the wire sieve, which is not new at all, connected with

the rim, which is fastened by what is known in the mechanical arts as "double-seaming." There is nothing new in double-seaming. It is a mode known long before this patent as one for fastening not only lid-heads of cans, etc., but for a variety of other purposes.

Hence, for the purposes of the present motion, it is only necessary for this court to determine first, that the essential element in plaintiff's patent is a combination of a hoop with a sieve-cloth, whereby the edge of the sieve-cloth is clasped within the hoop, and fastened by swaging.

Now, the connection of a sieve-cloth with the hoop, in itself, is not his patent, unless the swaging follows. And he had no patent except for the combination. It is a combination patent. Swaging is the important element in determining this patent.

What is swaging? It is a mechanical device whereby compression is produced in a variety of forms other than a plane surface, whether it be curved, hexagonal or otherwise. The essential element and advantage of the patent of the plaintiff is, that by swaging he fastens his sieve to the rim by a swaging process, which tightens the sieve itself, and thereby necessarily produces the rim below, so that the sieve itself does not rest on a line with that rim. Thus, if it were brought over externally with regard to it, the sieve would rest on the rim, but, by being swaged in the mode here indicated, not only produces the rim, but tightens the sieve-head by but one operation, and, so far as the swaging is concerned, produces the required result.

The defendant simply resorts to an old and well-known mode of double-seaming, which is entirely distinct and different from plaintiff's mode. Double-seaming is simply double-bending a metallic material so that the wire of the sieve passes through one hoop with another over it, and thus, by fastening the sieve together, retains its position without swaging at all. There is nothing new in the double-seaming process as a mode of fastening. You may fasten a preserve or any other can by the double-seaming process, which is entirely simple in itself—old and well known to every housewife and every mechanic. But swaging is an entirely different matter. It is the producing of a given

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form and given result by the use of what are known as "swaging-tools," which tools produce from the two parts any form that you desire produced. Thus a straight impression, parallel, as two hooks, produced by compression, is no swaging at all. By swaging you may make them take any desired form. If you wish to produce a curved form, and one tool is pressed convex against a concave surface, the material between will take the curved form.

There is nothing new at all or strange in placing two things parallel with each other, and with sufficient application of force squeezing them together. There is nothing new in that. It is as old as the use of two parallel forces. But, by the use of swaging, you may give any form you desire, consequent upon the use of swaging-tools. This patent, then, is for the use of a swaging-tool, in the manner described in the claim, which accomplishes the result therein stated.

The defendant uses no swaging-tool, but resorts to the old and well-known mode of double-seaming. This is the essential element on which this bill is founded.

The second element is for a design patent.

But, before passing on that, I will remark that, looking at the affidavits filed by the plaintiff and defendant with regard to the alleged infringement of the combination patent, if the matter rested solely on the affidavits, the weight of testimony would be entirely against the plaintiff. But there are certain matters, as the Supreme Court of the United States has decided, consonant with right reason, which the court can always consider independent of affidavits—such general principles as are supposed to be known to every one of ordinary intelligence. Now, every one of ordinary observation and intelligence has known for a long period of time what double-seaming is, and, though he may not have known the name, he may or may not have known what swaging is. The testimony before the court shows what swaging is, and in the light of these matters the court determines that it is an essential element to plaintiff's patent, that swaging should be used in connection with his hoop and tightening process.

The second matter involved in his bill is what is called a "design patent," concerning which there are one or more

affidavits presented. This is the question to be considered first. What is a design patent? Complainant insists that he is assignee of the design patent, whereby through flaring—a conical section—these sieves may be nested. Without going into the discussion whether this is, within the meaning of the patent law, a design patent, which is extremely doubtful, it must suffice to say that, in the light of the affidavits and common experience, the alleged design is nothing new. And even if it fell within the meaning of the patent law, as a patentable design, there is no novelty in it. Putting one thing in another, and making it a little flaring instead of rectangular, is an old matter

Third. Plaintiff claims that this defendant has infringed his trade-mark. He says that his product is called a "metallic sieve," and puts it on the market as "Mann's metallic sieve." This is his trade-mark.

Defendant's sieve bears the name of this corporation—"The St. Louis Wire Goods Company." Defendant sends its product on the market under its specific brand. So far as any pretence exists here that the trade-mark exists in the words "metallic sieve," disconnected from the words "Mann's metallic sieve," there can be no foundation for an injunction. The metallic sieve is nothing new. It is well-known. But if this defendant had designated his sieve "Mann's metallic sieve," he would have infringed his trade-mark. He stamps on the metallic sieve his own name, thus indicating that it is his own manufacture, and consequently he does not fall within any rule known to trade-marks.

This matter has been thrust upon me in the midst of other business, and I have not had time to write an opinion; but it is immaterial in this stage of the inquiry. I treat the patent as valid, and I treat as an essential element of that patent the swaging process whereby plaintiff's result is produced. As defendant's result is obtained by other than the swaging process, there is no infringement

The defendant's product is produced by double-seaming, which is entirely distinct and separate from swaging, and known long before this patent was issued.

Andrews v. Spear.

As to the designed patent, it is doubtful whether it falls within the purview of the patent law. If it does it has no novelty.

As to plaintiff's trade-mark, it is not used by defendant, and hence the motion for provisional injunction is refused.

Coburn & Thacher, for the complainant.

S. S. Boyd, for the defendant.

WILLIAM D. ANDREWS ET AL.

vs.

O. E. SPEAR. IN EQUITY.

Upon an application for a preliminary injunction, it appearing that this suit had been commenced nearly twelve months previously, and the principal ground relied on for applying for the injunction being that the validity of the patent had already been sustained by a decision in another circuit, rendered six months before this suit was commenced, and to which the complainants were parties : *Held*, that the application was made too late, and must be refused.

(Before NELSON, J., District of Minnesota, September, 1877.)

NELSON, J.

I decline to grant a preliminary injunction at this time.

The suit was instituted in November, 1876, and, as appears from the papers before me upon this motion, is in preparation for final hearing at the next term in December. The evidence of witnesses already taken before the master has been used as affidavits to be considered in disposing of the motion, and I am asked to examine it with reference to the claim for this preliminary injunction, in advance of presentation at the final hearing. I do not think, at this late day, after nearly a year has passed since the commence-

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ment of this suit, and it is about to be argued and submitted upon the merits, I am required, in the exercise of a sound discretion, to give complainants the preliminary relief asked.

The principal reason urged upon this application is, that a previous decision has been rendered, in a suit in the second circuit, sustaining the validity of the patent. This court has recognized the great weight to be given to such a decision upon an application for an injunction (*American Middlings Purifier Company v. Christian*, 4 Dill., 448), but, inasmuch as it was rendered six months before the commencement of this suit, and the complainants here were parties thereto, and fully aware of the effect of such decision in their behalf, some more persuasive reason must be urged, which will account for this delay, until the case is now about to be submitted and considered upon the pleadings and all the evidence. The pecuniary condition of the defendant is not changed from what it was in March last, and cannot be considered now as a controlling reason for granting the injunction.

The complainants have leave to renew this application, in case the suit is not heard at the next regular term.

John Y. Page, for the complainants.

Davis, O'Brien & Wilson, for the defendants.

HENRY M. STOW

vs.

THE CITY OF CHICAGO. IN EQUITY.*

The reason which the patentee gives for the operation or use of his device is not conclusive.

Where it appeared that, in a patented pavement, the driving down of wedges into the earth under the blocks could be accomplished just the same under a prior patented device as under the complainant's device: *Held*, that although the prior patentee does not allude to the driving of the

* Affirmed by Supreme Court, 3 Morrison's Tr., 509.

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wedges under the blocks for the purpose of compacting the earth, yet, as it produces that result, his failure to state that as one of the reasons or results does not necessarily affect the question of the anticipation of complainant's invention by the prior patented device.

Whether the sharpening of wooden blocks and setting them together and driving them down so as to make a solid foundation for a pavement is a patentable invention, when it appeared that cobble stones had previously been used with their sharp or smaller ends downwards for the same purposes, in substantially the same way, *quere*.

Where an inventor patents a device, and subsequently obtains another patent for some of the previously patented parts of such device, the second patent is anticipated by the antecedent patented device. It is not a patentable invention, in view of the state of the art, to substitute wooden blocks for stone which had theretofore been used.

A patent for a method of spacing blocks in laying a patented pavement, by use of a removable strip or board of the thickness of the required spaces, against which the blocks were set, and which board, after they were set, was removed so as to leave a space the required distance between the rows or tiers of blocks, is not a patentable improvement in view of the state of the art generally, and particularly that joiners who set picket fences have previously been accustomed to use a picket or spacing-board to measure the spaces between the pickets, and against which he sets and nails each picket.

A prior inventor having patented improvements in pavements, consisting of an improved foundation made of a board covering, laid on the old sand or earthy foundation, with a superstructure of alternate rows of vertical blocks and compacted filling, laid transversely or across the roadway, it is not, in view of this state of the art, invention, to leave out the improved foundation, and use an old foundation with the other parts of the pavement.

A reconstruction of a machine, so that a less number of parts will perform all of the functions of the greater, may be invention of a high order, but the omission of a part, with a corresponding omission in function, so that the retained parts do just what they did before the patented invention, is not patentable.

The inventions claimed in the following patents, namely ; a reissued patent, dated January 19th, 1869, Number 3,274, granted to complainant for an improved pavement ; a patent, dated February 25th, 1868, Number 74,862, granted to complainant for an improved street pavement ; a patent, dated April 6th, 1869, Number 88,765, granted to D. L. De Golyer for an improvement in laying down block pavement ; and a patent, dated December 31st, 1872, Number 134,404, granted to complainant for an improvement in wood pavement, *held* to have been anticipated.

(Before BLODGETT, J., Northern District of Illinois, September, 1877.)

BLODGETT, J.

This is a bill in equity, charging the defendant with an infringement of four patents, issued by the United States, and playing an account for damages, and an injunction.

The patents described in the bill are : First, A patent, dated December 10th, 1867, No. 72,110, issued to the complainant, and reissued January 19th, 1869, reissue No. 3,274 for an improved pavement. Second, Patent, dated February 25th, 1868, No. 74,862, issued to the complainant for an improved street pavement. Third, Patent, dated April 6th, 1869, No. 88,765 issued to D. L. De Golyer for an improvement in laying down block pavements, and of which complainant claims to be assignee. Fourth, Patent, dated December 31st, 1872, No. 134,404, issued to the complainant for an improvement in wood pavements. The defendant denies any infringement ; and also denies the novelty of the alleged improvements claimed in the patents.

The patent issued December 10th, 1867, and reissued January 19th, 1869, is for a pavement composed of alternate tiers of square-ended and wedge-shaped blocks, the latter, that is the wedges, being driven down into the foundation bed of sand or earth ; also, a pavement composed of blocks, with the lower ends all wedge-shaped, and all driven or rammed down into a foundation of sand or earth. From the proofs in this case, it appears that the complainant has been paid for all the pavement in which this device has been used, except a block on Market street, between Randolph and Lake, and the intersection of Lake and State streets, which were laid as samples, under the direction of the complainant and his brother, W. H. Stow. There were some of these pavements put down on Clark street, but Mr. McBean testifies that he did this under a license from the complainant, and the defendant was not to be liable therefor. He states that he has not yet paid Stow, but that does not make the city liable. It, therefore, hardly seems necessary to consider this patent, but if deemed material to do so, I would be of the opinion that this patent was anticipated in part, by an English patent issued to Stead, in 1839. In 1839, David Stead received a patent in England, which is a matter of public

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record in that country, and also in this country, by patent and by publication, for a wooden pavement made of octagonal blocks set together, and as the blocks go together they leave a square opening through which he drove a pile or wedge down into the earth or gravel, for the purpose, as he says, of laying his pavement firmly upon the earth in newly made embankments. The reason which the patentee gives for the operation or use of his device, is not conclusive. A man may, in other words, invent an improvement producing results beyond what he knows or dreams of, and a better reason may be given by a skilled person, than the one assigned, for the use of the device which is used or adopted. So, in this case, the driving down of these wedges into the earth, under the blocks, could be done just the same under the Stead patent, and the Stead device, as they could be under the Stow device ; although Stead does not allude to the driving of the wedge down there for the purpose of compacting the earth, yet it produces that result. His failure to state that as one of the reasons or results, does not necessarily change the fact, that there is no longer anything novel in the Stow device, from the fact that Stead anticipated him by a great many years.

The second patent is for a pavement composed of tiers, or rows of wedge-shaped wood blocks, driven into a foundation of sand or earth, as there shown. It is claimed that by that means the earth would be compacted. The spaces between the rows are then filled in with gravel.

It is sufficient, in regard to this patent, to say, that there was no proof that the city has ever used it ; but if it had been used, it may well be doubted, whether the patent can be sustained, as his wedged blocks do not, it seems to me, differ in principle from the old cobble-stone pavement, made of cobble-stones with their sharp or pointed ends, or smaller ends, set downwards, and the whole rammed or driven into the sand, or gravel, on which it was laid. We all know of our own knowledge, that is, every person who has seen a cobble-stone pavement knows that the process of making it is to set the cobble-stones with their small ends downward, upon the ballast or gravel, cover with sand to fill the spaces between them,

and then ram the whole structure down solid. Now here is simply this difference : A man, instead of using the sharp ends of the cobble-stones, sharpens wooden blocks, and sets them together, and drives them down, so as to make a solid foundation : it being considered that the cobble-stone pavements are so laid, and that the substitution of a new material is not patentable. This patent is also obviously anticipated in the second form of the original patent of December 10th, 1867. Mr. Stow states that he claimed a wooden pavement composed of blocks with the lower ends wedge-formed, and all driven down into a foundation bed of sand or earth. Now here in 1867, the year before this patent, in his first patent, where he claims the alternate wedge-shape and square-ended blocks, he also describes and claims a series of wedge-shaped blocks, all driven down into the sand or gravel ; so, it seems to me, that he has here, by the second patent, attempted to prolong the life of his first patent, or first device, by taking a patent afterward upon the wedge-shaped blocks, shown and claimed with the wedge shape and alternate square-ended blocks.

The De Golyer patent (the third), is one for a method of spacing distances between the blocks, by use of a removable strip or board of the thickness of the required spaces. That is to say, the way in which the blocks were set up against each other, and a board set between them, while they were being set, and, after they were set, the board removed, so as to leave a space the required distance between the rows or tiers of blocks.

This is fairly anticipated, in my estimation, by the patent of McDougal, where he had a spacing apparatus like this, set between the blocks, and removable. But, in point of fact, as the evidence shows in this case, the skilful workmen, who lay these wooden pavements, no longer depend upon the spacing apparatus at all, but use their fingers and their eyes, and they become so skilled, that they can readily make the spaces of a uniform width, by the application of their fingers as they lay their blocks, as well as by a spacing board, or any other device of that kind. And the case is fairly illustrated by the improvement in telegraphing. Formerly, we all know, the process of telegraphing, by the Morse telegraph,

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was by a reel upon which a paper was wound, and the action of the machine made a dot, or dots and lines. It was necessary to write out the words by this operation. But, in course of time, the operators became so skilful that the ear took the place of the paper and reels, and now, no person is considered skilful enough to act as a telegraph operator, unless the ear is sufficiently trained to enable him to dispense with the reel and paper. So here, in the actual operation of the laying of these wooden pavements, the eyes and fingers of the workmen dispense with the spacing apparatus. There is also no evidence in the record, that I can find, and I have looked carefully through it, of any use by the city of this special device. I find no proof that the city has ever adopted this removable spacing board as a matter of practice. But, even if they had, a mere mechanical device, such as is used by joiners in fitting floors together, or in fitting lattice-work or pickets on a picket fence, or any other place where uniform spacing is required, would seem to anticipate this device. In setting an ordinary picket fence, the joiner, who sets the pickets, uses another picket or spacing board for the purpose of securing uniformity in the spacings.

This brings us to the consideration of the last patent issued to the complainant, in December, 1872, and it is mainly upon this patent that the controversy in this case turns. The device covered by this patent is described by the patentee in the reissue of his first (1867) patent as follows: "The nature of my invention consists in putting down a pavement of wood, or other suitable material, upon a foundation bed of sand or loose earth, and packing the sand or earth by means of wedge-blocks driven down into the same, and forming a part, or the whole, of the pavement." He also says, in reference to these wedge-blocks, "it will not be absolutely necessary to bevel the lower ends of the blocks No. 2, as even square-ended blocks will act as wedges." Also that the blocks No. 2 may be of dressed stone, brick or wood, or any suitable material that will bear driving down into the foundation bed.

His last specification is as follows: "In constructing my pavement I first grade the street, and cover it to a depth of not less than three inches with sand or loam, which I wet and pack

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with a maul or rammer, until the whole is of sufficient compactness. I then strike the surface to a proper grade, and lay the blocks, A, in rows transversely across the street, placing between the rows a removable strip of wood, B, of sufficient thickness to form the necessary space between the blocks, as shown. After a sufficient number of rows have been laid in this manner, I remove the strips and partially fill the spaces with sand or gravel. I then drive the gravel or sand in said spaces into the sand foundation below, by means of a swage maul, or other suitable instrument, until the foundation under the blocks is sufficiently compressed. I then fill the spaces with gravel or sand, and cover with coal tar or other cement, or with gravel or sand alone, and go over the whole with a smooth iron instrument to finish the surface. What I claim is a pavement composed of blocks laid in rows directly upon the sand foundation, with spaces between the rows, filled with sand or gravel, which is swaged or driven into said foundation, substantially as and for the purpose specified."

We have a sample, or model rather, of the pavement as the complainant claims to make it : that is square-ended blocks set upon the sand, the spaces between them filled with gravel, and that packed or swaged down until it comes somewhat below the ends of the blocks. It will be noticed, that while the patentee, in his patent title, names wooden blocks as the main material used in his pavement, yet he has described and claimed broadly a pavement composed of blocks laid directly upon a sand foundation, with spaces between the rows, filled with sand or gravel swaged or driven down into the sand. He names wooden blocks in his title, yet he does not, in his specification or claim, limit himself to the use of wooden blocks, but can use any kind of blocks. And it may well be suggested, I think, in view of the state of the art, whether this claim is not too broad, because the use of other material as well as wood is so old in the art, that it is at least questionable in my mind, whether there is any novelty in making a pavement of blocks of any material, set in sand or gravel foundation, with the spaces filled with gravel or sand. That, however, is a point not made in the trial, and I do not attach much importance to it. The question is, was this de-

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vice new at the time this patent was applied for? It seems to contain the following as some of its elements: First, the street or roadway is to be brought to a suitable grade and shape, and covered to a depth of not less than three inches with sand or loam; second, the whole is then rammed, until it is of sufficient compactness; third, upon the grade so formed, the blocks are laid in rows transversely, or across the street, leaving sufficient spaces between the rows; fourth, these spaces are partially filled with sand or gravel, which is swaged or rammed, until the foundation is sufficiently compact; fifth, the spaces are then wholly filled up with sand or gravel, or with sand and gravel and coal tar, so as to make the surface even with the top of the blocks.

There is nothing in the patent which makes it necessary for the constructor to use wooden blocks. He might, for aught that appears, use stone, concrete, or any other kind of blocks. And it is a matter of general knowledge, that pavements have, for many years before this patent was asked for, been laid with stone blocks set upon a road-bed prepared with sand or gravel, and I must insist that I can see nothing patentable in the idea of substituting wooden blocks for stone, which had heretofore been used. But even if he confined himself to the use of wood, the proof shows that Stead, in 1839, proposed to make a pavement of wooden blocks set on sand or earth foundation. In 1854, Nicolson took out his patent for a wood pavement, which he constructed by bringing the road-bed to the proper grade, upon which he laid a covering of boards; on these boards he set rows of wooden blocks; against each row he set a shorter row of thinner blocks, or a strip of boards about half the height of the first row, and so he continued to set alternate rows of long and short blocks or rows of blocks, with an intervening strip of board between; and in the spaces between the rows of longer blocks, he applied gravel and coal tar, or other cementing matter, which was rammed or swaged, so as to make the whole firm and solid. The pavement in question is the Nicolson device or combination, with the board floor left out, and the spaces between the rows of main blocks filled with gravel, instead of partly filling the spaces with a strip of board, or short blocks.

This patent was before his Honor, Justice Field, of the

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Supreme Court, in 1868. The Nicolson patent is referred to in that case. He there referred to the state of the art at the time of the granting of the Nicolson patent, in these words : " This pavement," that is the Nicolson pavement, " is not the entire invention of Nicolson. Wooden pavements were invented and used in different parts of the world, many years before his attention was directed to the subject. He makes no claim of novelty in the use of blocks, or of the gravel and tar between or over them, nor of any of the separate parts that go to make up the structure. What he claims as his invention is the combination of the foundation of the pavement with the blocks, or the long blocks, and strips of board, these being bounded so as to form cells or channels, with wooden bottoms, for the reception of brick, stone, or gravel and tar, as already described."

Now, here is the judicial finding of his Honor Justice Field on the state of the art, at the time Nicolson entered the field as an inventor, in 1854, so that wooden blocks, with the spaces or channels between them filled with gravel and tar, was then old, and had been used and adopted long before Nicolson's patent, in 1854, and he only sustained Nicolson's patent upon the ground that it was a combination of the road-bed, ballasted and packed, with boards on top, the blocks set on the boards, and then the pavement filled in with coal tar and gravel, as described in the Nicolson patent. That is, he sustained it as a combination, and such a combination as no person before Nicolson had ever made, and a combination of useful elements.

In view of the state of the art, the question arises, in reference to the patent that is now before us : can any person, after Nicolson has gone over the field and made and described his invention, dismember Nicolson's combination, and get patents for a part of the Nicolson combination ? That is to say, can a party make an invention, by omitting from a combination an element which performed a distinct office therein, and leaving the remaining ones to perform the same offices or functions, without the omitted element, as they did with it ? Nicolson's improvements were found to consist of an improved foundation, consisting of a board covering, laid on the old sand or earth foundation, and, in his best form of a

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superstructure, of alternate rows of vertical blocks and compacted filling laid transversely, or across the roadway. Is it invention, to take the boards from under Nicolson's superstructure, and remit it back to the common foundation? Is it not rather a mere matter of judgment with the constructor, whether he will use the improved or the common foundation? It seems to me, that it cannot be, that he has made an invention, when he decides to leave out the improved foundation. Suppose a man to have invented a harness with a breeching, can it be invention for another man to take the breeching off and leave the remaining parts to perform the identical functions that they performed before. A reconstruction of a machine, so that a less number of parts will perform all of the functions of the greater, may be invention of a high order, but the omission of a part, with a corresponding omission in function, so that the retained parts do just what they did before in the combination, cannot be other than a mere matter of judgment, depending upon whether it is desirable to have the machine do all, or less, than it did before.

Does this inventor do anything more than others have done before, or that any lazy operative, whom Nicolson might set to construct his pavement, might do—that is, leave the boards out, and set the blocks directly on the ground, and ram the spaces full of gravel? It seems to me that it does not rise to the dignity of an invention. Leaving out a member of this Nicolson combination, cannot be the proper subject matter of a patent.

Stead, in 1839, laid his wooden blocks upon a road-bed of gravel or earth, and provided that, in certain cases, the spaces between the blocks should be filled, or partly filled up. In 1864, Chappell procured a patent, in which the condition of the art is thus described by him: "Wooden pavements have been constructed on the continent of Europe, and in the United States, by laying wood blocks endwise of the grain, in parallel rows, with openings or channels between, into which gravel or gas tar were placed." Now this is a description found upon the public records of the Patent Office, years before this patent was issued or applied for, in which the state of the art was described at that time (in 1864), by saying that pavements

were well known on the continent of Europe, and in the United States, made of wood blocks set endwise on the earth, and in parallel rows, with openings or channels between them, into which gravel and coal tar were placed. Again, the only thing that can be claimed as different in the Stow combination, from what is described here by Chappell, is that he claims to ram his filling harder down into the sub-grade, so as to compact the earth underneath. Now, is it a subject matter for a patent, to strike a blow of ten pounds, instead of a blow of four pounds weight? A blow which shall drive this filling down into the ballast underneath, instead of leaving it at the top. Is it the subject matter of a patent to drive a nail home into the wood, so that it is below the surface, or to leave it sticking up even? Much stress is laid by the complainant in the testimony, upon the preparation of the road-bed, by ramming or packing until the whole is of sufficient compactness, before the blocks are set thereon. But Cowing, whose invention dates back to November, 1865, makes express provision for preparing the road-bed, by grading to the proper form and ramming the same solid, so that the idea of ramming the road-bed solid, making it compact before setting the blocks upon it, is an old idea, described by Cowing in 1865.

The setting the blocks, and then filling and ramming the crevices with earth or gravel, was a provision also made by Cowing. The only difference is, that the Cowing blocks were not set in line so that channels extended across the street in continuous lines. Cowing does not expressly direct us to ram or swage the gravel down into the sand or gravel ballast underneath, but he provides for ramming the filling, which would of necessity drive it down to some degree into the ballast, and the degree of ramming can hardly be made the subject matter of a patent. We must assume that Cowing intended to have his filling sufficiently rammed to make a firm and solid pavement, and that is all Mr. Stow proposes. How much swaging or ramming would be needed, to make the filling penetrate the foundation, must depend entirely upon the degree of compactness to which the road-bed was brought before the blocks were set. That is to say, if he pounds or rams, or, in any other way or method, compacts the road-bed

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underneath, or if the road-bed upon which the blocks are set is solid enough, so that it needs no compacting, then he need not, in order to make a solid pavement, ram his filling below the blocks at all. At all events, the only difference between Stow and Cowing, in the matter of swaging or ramming, is one of degree. So, also, the patent of Van Cowp and Hodgman provides for ramming the filling between the blocks, until the same is thoroughly compacted. Now, where is the difference, except in degree, when in the Van Cowp and Hodgman patent they provide for ramming the filling between the blocks, until the whole is thoroughly compacted? Mr. Stow certainly would not do any more than that. All he wants to do, is to ram the filling, until he makes a solid roadway, and Van Cowp and Hodgman propose to do that. I might go through, in detail, with all the various patents antedating the complainant's patent, which are in evidence by the defendant, but, for want of time, I must content myself with the remark, that several patents, besides these I have specially described, seem to have anticipated the complainant, both in the idea of setting the blocks directly upon an earth or sand foundation, and also filling the spaces between the blocks with gravel or sand, packing or ramming them firmly in such spaces. Aside from these patents, we have the Nicolson patent of 1854, which was only sustained because it was a new combination of useful elements; but, after Nicolson instructed the public how to make a pavement of his construction, it does not seem that another man could have a patent for using a part of the same, as he used it. It seems to be obvious, that the degree of packing to which the filling between the Stow blocks is to be subjected, depends largely upon the foundation upon which the blocks are set. The sand or loam dressing, which he provides for, is to be first compacted as hard as possible before the blocks are set, and if sufficiently compact to sustain the blocks, then no ramming down below the ends of the blocks is necessary or possible, and the invention would, therefore, practically, be inoperative.

Among the defendant's exhibits, is the Prescott patent, of the issue of June 20th, 1871, which is almost identical with complainant's patent, issued in December, 1872, eighteen months

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afterward. It is almost identical in description with the Stow specification. Prescott says his pavement is composed of a series of blocks having their intermediate spaces filled with concrete, the concrete being caused to extend down below the lower line of the blocks into the road-bed, for the purpose of forming the gravel spacing, as described. He specifies that the concrete is placed or driven down into the interstices between the blocks, and extends three or four inches below the surface of the road-bed or street bed, so as to effectually prevent water from going under the blocks, and also prevent water from accumulating, and running under the pavement. Then he describes the mode of laying it, as precisely the Stow method, by setting blocks endwise. But I find in the proofs a more insuperable answer to this patent than any which I have named, and it is a fact, which I consider is abundantly substantiated by the evidence, that this precise form of wooden pavement was used in this city as early as 1864. Mr. J. K. Thompson, and other witnesses, whose testimony is in the record, have all testified, that in 1864, the city of Chicago laid a pavement at the end of the viaduct on North State street, where it forms a junction with Kinzie street, in which the precise combination of blocks, filled in the spaces between with gravel, and the whole rammed, was used. This was in 1864, and the patent in question was not issued until 1872. In 1871 or 1870—the witness seems to be a little in doubt, although my impression, which is not testimony, would be that it must have been in 1870, when the La Salle street tunnel was built—a portion of the road-bed in that tunnel was laid with the same kind of pavement that was used at the junction of Kinzie and State streets, by a combination of blocks and gravel filling, without the boards, as now claimed by Stow. Now here is the proof of the state of the art, by other inventors; here is the proof of the use of precisely this Stow invention, in the city of Chicago, as early as 1864, nearly eight years prior to this patent; and it seems to me there is no ground of novelty for this patent to stand on. The patentee must be considered as anticipated in every feature of his patent by those who had in fact taken out patents, or those who had used a pavement, similar in character, before he entered the field.

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In this view the bill will be dismissed, for want of novelty.

Carter, Becker & Dale and *J. N. Jewett*, for the complainant.

West & Bond, for the defendant.

THE BAILEY WRINGING MACHINE COMPANY

vs.

F. F. ADAMS ET AL. IN EQUITY.

The rules which should govern courts in granting preliminary injunctions, considered.

Upon the motion, the court ought not to undertake the decision of fairly disputable questions of law and fact.

When the motion is made and contested only upon the evidence which resulted in a judicial decision in complainant's favor in another case, such evidence ought to be taken as conclusively establishing the complainant's title. Not so, however, if new evidence is exhibited of such significance as would probably, if it had been presented, have changed the former decision.

(Before McKENNAN, J., Western District of Pennsylvania, September, 1877.)

McKENNAN, J.

A motion for a provisional injunction is always an appeal to the discretion of the court, but, in the class of cases to which the present one belongs, such discretion ought to be exercised only when "the complainant's title, and the defendant's infringement, are admitted, or are so clear and palpable that the court can entertain no doubt on the subject." "The court are not bound, at this stage of the cause, to decide doubtful and difficult questions of law, or disputed questions of fact, nor exercise this high and dangerous power (if exercised rashly) in doubtful cases, before the alleged offender shall have an opportunity of a full and fair hearing."

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Grier, J., in *Parker v. Sears*, 1 Fish., 96. This has long been the rule in this circuit at least.

The bill in this case is founded on a patent issued to the complainant as assignee, for an improvement in wringing machines. It is one division of the fourth reissue of letters patent originally issued to John Allender on the 11th of January, 1859, and extended for seven years. The original patent contained but two claims, the gravamen of which was a wringing roller of peculiar mechanical construction, with a covering of vulcanized india rubber, or any other elastic compound impervious to water. To each reissue new claims have been added, until at last (in the reissue of February 9th, 1875), they are eight in number, all of which, except the two original claims, are for subdivided combinations of devices which, in the aggregate, constitute a complete wringing machine. That these several reissues, and the expansion of the claims of the patent, were induced by the progress of the art to which they appertain, seems to me to be evident, still, they may be all valid, if the combinations claimed were embodied in the original machine, and were the product of the patentee's genius. But to determine this, they must be carefully scrutinized in connection with the state of the art at the date of the patent, and to this end, the fullest opportunity for inquiry and examination is essential. In this stage of the case, and without an opportunity for a full hearing, the court ought not to undertake the decision of fairly disputable questions of law and fact, if there be any such, by an exercise of the power which this motion invokes.

Undeniably the defendants do not infringe the two first, and the fourth claims of the patent. The third, fifth, sixth, seventh and eighth claims they are alleged to have infringed.

The last two of these claims are new, and appear for the first time in the present reissue. They are for combinations in which the guide or guides, described in the specification and shown in drawings and model, are a component element. Now, it is not so clear as to be free from doubt, that the flanges extending over the ends of the rollers in the defendants' machines, which form part of the standard in which the journals of the rollers are sup-

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ported, are the equivalents of the guide in the complainant's machine. They are formally different devices, and do not seem to have been expressly intended to perform the same functions. The only office of the flanges is to prevent the clothes, passing through the rollers, from running off the ends and becoming entangled around the iron shafts. But although this effect might incidentally result from the use of the guide, such an adaptation of it does not seem to have been contemplated by the patentee. The specification requires—and this is clearly illustrated by the drawings—both faces of the machine between the standards to be covered with boards, which extend over the ends of the rollers, and to which are to be fastened a semicircular spout, simply "to guide the cloth or clothes between the rollers," so as to secure the application of their pressure, at a point upon them, at which, by reason of their peculiar construction, they have the greatest degree of elasticity. Not only is the exclusive function of the flanges not claimed for, or attributed to, any of the devices described in the specification, but, in view of the prescribed structure of the machine, the independent performance of it by the guide is obviously impracticable. Under these circumstances, the applicability of the doctrine of mechanical equivalents, as it is defined in recent cases, may well be questioned; and the infringement of these claims is, therefore, a fair subject of contestation.

But these claims, as well as the others referred to, are contested for want of novelty. Upon this point several affidavits of experienced and intelligent experts have been produced on each side, in which the opinions indicated are as positively expressed, as they are irreconcilably diverse. The weight of such evidence can only be properly estimated after the witnesses have been subjected to the ordeal of a cross-examination. Besides these, a large number of prior patents have been exhibited, which, in the examination I have been able to give them, raise doubts of the validity of some of the contested claims. These doubts may be removed, but the partial proofs which suggest them ought to be remitted to an exhaustive discussion, and more careful scrutiny, at a final hearing.

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In reaching this conclusion, I am not unmindful of the weight properly due to a judicial decision in favor of the patent. When made upon final hearing, and upon evidence which is only reproduced at a subsequent interlocutory hearing, it ought to be taken as conclusively establishing the complainant's title. Not so, however, if new evidence is exhibited, of such significance as would probably, if it had been presented, have changed the former decision.

This patent has been repeatedly in litigation, but in one case only (*Bailey Washing and Wringing Machine Co. v. Lincoln*, 4 Fisb., 379), was it subjected to a careful judicial examination, at final hearing. If the able judge, who decided that case, had had before him the new evidence introduced at this hearing, I am not prepared to say that his conclusions might not have been materially modified, if not entirely changed by it. While, therefore, I would, without question, interlocutorily adopt his judgment of the effect of the proofs before him, I cannot discard the influence of doubts caused by new evidence of material pertinency and now decide "that the complainant's title and the defendants' infringement are so clear and palpable that the court can entertain no doubt on the subject."

The motion for a preliminary injunction is, therefore, denied.

Marcus A. Woodward, for the complainant.

Hill & Ellsworth, for the defendants.

DAVID G. YUENGLING

vs.

FOUNTAIN D. JOHNSON. IN EQUITY.

The provisions of the statutes, conferring, upon the Circuit Courts, power, in cases where there appears to be danger of irreparable injury from delay, to grant an order restraining the act sought to be enjoined, pending the decision of a motion for a preliminary injunction, reviewed.

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Section 5 of the Judiciary Act of Congress of March 3d, 1793 (1 U. S. Stat. at Large, 334-5), requiring previous notice to the adverse party of the time and place of moving for an injunction, was repealed by section 5596 of the Revised Statutes.

It seems, that section 5 of the Judiciary Act of March 3d, 1793, so far as requiring previous notice, had been previously repealed by the Act of June 1st, 1872 (17 U. S. Stat. at Large, 197).

It seems, also, that section 5 of the Judiciary Act of March 3d, 1793, so far as requiring previous notice of application for injunctions in patent cases, had been previously repealed by the Act of July 8th, 1870 (16 U. S. Stat. at Large, 206).

The action of the Patent Office, where the parties have been before it, upon an interference, is sufficient to make such a *prima facie* case as to justify the action of a court, on almost any motion for a preliminary injunction.

A court may safely presume, upon a motion for a preliminary injunction, that the action of the Patent Office, after a sharp contest between patent lawyers and experts, is correct.

The doctrine of mechanical equivalents, in inventions which consist of the mere arrangements of old devices, discussed.

(Before HUGHES, J., Eastern District of Virginia, September, 1877.)

HUGHES, J.

On the 8th of August, the complainant filed a bill of injunction, in this court, in term at Norfolk, and moved for a temporary injunction, in accordance with the prayer of the bill, and for an immediate restraining order. He also filed sundry documents and affidavits, making out a *prima facie* case for an injunction. The object was to prevent one Fountain D. Johnson, manufacturer of a certain mechanical register, called the Moffett register, from selling and delivering these instruments, it appearing that he was about to deliver a large number of them to the Auditor of Public Accounts of Virginia, to be distributed by him to retail liquor dealers, throughout the State, for use.

The evidence filed with the bill showed, that skilled officers of the patent bureau of the United States had officially decided this Moffett register to be an infringement of a patent, the exclusive right to use which was owned by the complainant, for the State of Virginia; and it was plain, if this should prove true, that the State was about to embark, in a futile manner, with an improper instrument, upon a new plan of

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taxation, devised by her legislature, to the injury of the rights of the complainant, and that this was likely to be done in a few days.

It being apparent to the court, that in case the pretensions of the claimant were true, the injury and confusion resulting would be irreparable, and that the complainant might have no recourse, except to the liberality of the legislature of the State, an order was entered by which : 1st. The defendant in the bill was required to show cause at Alexandria, on the 4th instant, why the motion for a temporary injunction should not be granted. 2d. Restraining the defendant, and all others, meantime, from making, using or vending the said Moffett register ; and 3d. Requiring the complainant to file a bond, in the penalty of ten thousand dollars, to answer any orders of this court against him in this cause.

The expediency of this order seemed obvious to the court ; but it felt, at first, some doubt of its power to grant the temporary restraining order, except after reasonable previous notice served. Upon a critical examination of the condition of the law on the subject, however, this doubt was removed, as will appear from the following review of the legislation of Congress, and the order was given.

Section five of the Judiciary Act of Congress of March 3d, 1793 (ch. 22 of Acts of 1793, United States Statutes at Large, vol. 1., pages 334-5), concludes with the words : " Nor shall a writ of injunction be granted in any case without reasonable previous notice to the adverse party, or his attorney, of the time and place of moving for the same."

The greater portion of the provisions of this act of 1793 were incorporated into the Revised Statutes of June 22d, 1874, ch. 12 ; but the foregoing clause, requiring reasonable previous notice to be given in all cases of injunction, was left out, and, therefore, stands repealed by section 5,596 of the Revised Statutes.

Instead of this provision, the seventh section of the Judiciary Act of June 1st, 1872 (ch. 255, vol. 17, page 197, United States Statutes at Large), was inserted, which contains these words :

" Whenever notice is given of a motion for an injunction out of a circuit or district court of the United States, the

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court, or judge thereof, may, if there appear to be danger of irreparable injury from delay, grant an order restraining the act sought to be enjoined until the decision upon the motion. Such order may be granted with or without security, in the discretion of the court or judge." This act had already been in force for years, before the enactment of the Revised Statutes, and had virtually not only repealed the clause quoted from the Judiciary Act of 1793, but also rendered subordinate to its own provisions that part of Rule 55 in equity, requiring previous reasonable notice to be given of motions for injunctions.

While the clause of the Act of 1793, in question, was in force, there were many decisions of the Supreme, and Circuit courts of the United States enforcing it, and these rulings of the courts have gone into the digests and text books in use by the Bar. But when the law itself fell, of course these rulings of the courts, and teachings of the text-books, ceased to be of authority in contravention of the later law. But, even before the passage of the Judiciary Act of June 1st, 1872, an act of Congress, revising, digesting and consolidating all the laws relating to patent rights was passed July 8th, 1870 (see United States Statutes at Large, vol. 16, page 206), and a section enacted in it, authorizing the courts of the United States to deal with injunctions in patent cases, in a special manner. This section placed injunctions in patent cases on a different footing from other injunctions. In this particular class of cases, the courts were released from the requirement to adhere strictly to the rules of practice, prescribed by law or rule of court, in general, for the Federal courts sitting in equity, and the Circuit Courts were vested with "power upon bill in equity, filed by any party aggrieved, to grant injunctions according to the course and principles of courts of equity, to prevent the violation of *any right secured by patent, on such terms as the court may deem reasonable.*" Thus was authority given to grant injunctions in patent cases, not upon such limited terms as were at the time required by law or rules in equity to be observed, in other cases, by the Circuit Courts of the United States sitting in equity, either as to notice, security or other requirement; but authority was given to grant them in patent cases, on such terms as accorded with the course and

principles of courts of equity, in general, and, as the particular court, in which the motion was made, "might deem reasonable." This law made injunctions in patent cases exceptional, and conferred on United States Circuit Courts an unrestricted discretion as to the terms of granting injunctions in them. This provision of the law of 1870 has been carried into the Revised Statutes, with slight literal modifications, and stands now the law of the land in the form of section 4921. Thus, in patent cases, where the emergency was urgent, the court might grant injunctions, without reasonable previous notice, before the law of 1872.

The passage of the Judiciary Act of June 1st, 1872, has given this power in all cases, and now injunctions may be granted in any case deemed exigent by the court, without previous notice, whether it be a patent case or not. The terms of the law of 1872, section 7, are, that "*whenever* notice is given of a motion for an injunction," the court or judge, if irreparable injury be likely to result from delay, may restrain temporarily, until the motion can be heard. *Whenever* means *at* whatever time notice is given, and does not mean *after* whatever time. Simultaneously, therefore, with the time of giving the rule to show cause against the motion, the court may grant an order restraining the act threatened, until the decision of the motion.

There is no doubt of the power under section 7 to instantly restrain in any urgent case. But, even if that were not so as to injunctions in general, there is no possible doubt of the *power*, under section 4921, to enjoin, in patent cases, without previous notice; a power which, however, should always be exercised with great caution.

Most of the questions, which have been argued at bar, will be more properly considered at the final hearing of this cause, and must be adjourned until that time.

The motion is now heard after three weeks' notice, on bill, answer and affidavits. The court will consider now only such questions as necessarily bear upon the motion for a preliminary injunction. It must endeavor, so far as practicable, to avoid committing, or concluding itself on every question which will arise at the final hearing, upon evidence regularly

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taken. The question now to be determined is, whether the complainant is entitled to a preliminary injunction. As his right to the exclusive use of the Fountain patent in Virginia may be assumed as undeniable, the principal inquiry for the court is, whether the Moffett register is an infringement of it. Even that question is not now to be finally decided, and the court ought not, and is not bound, to commit itself finally upon it.

The fact of infringement is denied, and the point to be now determined is, whether the fact is *prima facie* made to appear, with such certainty as to justify the court in granting a preliminary injunction against the use of the instrument *pendente lite*. The *prima facie* aspect of the case has been reversed since the 8th of August, when the temporary restraining order was granted. Then, the action of the Patent bureau had been such as to make, in the opinion of the court, a *prima facie* case for the complainant. Now, the case, in that particular, is changed. The action of the Patent bureau is such as to make a *prima facie* case for the defendant; for the Commissioner of Patents, whose action is final in that bureau, has reversed the judgment of his inferior officers, and virtually pronounced that the Moffett register is not an infringement of the Fountain register, by issuing a patent, to Moffett & Deane, for their invention, as new.

It is true that the issuing of patents is not conclusive upon the courts. Patents are subject to review by the courts. Suits, in a very large proportion of patent cases, are but means of appeal to the courts from the action of the Patent Office. Yet, while this is so, that action must always carry great weight with the courts. It is always very strongly persuasive with them. Patents are the results, generally, of contests between accomplished experts, and after such contests of the matured judgment of officers, selected and appointed by the President for their extraordinary competency and skill, I think it is hardly going too far to say, following Mr. Justice Grier, in *Goodyear v. Dunbar*, 1 Fisher, 472, that the action of the Patent Office is sufficient to make such a *prima facie* case as to justify the action of a court on almost any motion for a preliminary injunction.

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If, indeed, in any case, the general unanimous testimony of experts united in condemning the action of the Patent Office, in such case a court might well hesitate to treat that action as constituting a *prima facie* case for or against a preliminary injunction. But when, as in the present case, the weight of expert testimony is nearly evenly balanced, a court may safely presume that the action of the Patent Office, taken after a sharp contest between patent lawyers and experts, is *prima facie* correct.

On this ground alone I think I would be justified in refusing a preliminary injunction in the present case. But as a court is not at liberty to surrender itself to an unquestioning reliance upon the decision of another tribunal, when the duty and responsibility are upon itself to act upon its own convictions, I will state briefly the view of the facts of the case by which I am led to concur, for the present, in the judgment of the Commissioner of Patents.

The patent of Fountain is not for the invention of the mechanical devices used in making up his instrument, or of any of them. These are all old and in familiar use by the public. Fountain's patent is only for a particular combination and arrangement of these old and well-known devices in a manner to serve a particular purpose. Moffett & Deane's patent is of the same character. They employ old and well-known devices also ; and their patent is for a particular arrangement and combination of these devices in a manner to serve a particular purpose other than that of the Fountain register. And it is a fact, obvious from an inspection of the two instruments, that the devices employed in one instrument are not identical with those employed in the other ; and that the arrangement and combination of the respective devices made use of in each are different.

Fountain claims the invention of the worm meshing into a cogwheel to impart motion to the indexes. Moffett & Deane use no worm. The striking apparatus of the two instruments are different. . Fountain has a single spring attached to the hammer, without any means of withdrawing the hammer instantly from the bell. Moffett & Deane have two springs, one to throw the hammer against the bell, and another to instantly withdraw it.

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Moffett & Deane use a pinion to drive the registering apparatus; Fountain uses no pinion. Fountain's instrument is portable, and contrived especially for the purpose of registering fares taken on public conveyances; while Moffett & Deane's is intended to be stationary, and is contrived for the purpose of tallying drinks taken in a bar room.

Fountain, in his specifications, claims that "his invention is an improvement in fare-registers," "adapted to be carried in the hand," consisting in an "arrangement and combination of parts whereby full and half fares are registered, and an alarm sounded as rapidly as collected by the conductors," having "on its face one dial and two separate hands."

In his specifications he speaks of his instrument as nothing more than a fare-register; and in alluding to devices for registering *hundreds, thousands and ten thousands*, he expressly declares that these "form no part" of his instrument, thus indicating that his instrument was intended only for a fare register. These latter devices are essential parts of Moffett & Deane's register. Moffett & Deane's organization and combination of old devices is also for a special purpose, and that purpose one which was not contemplated by Fountain, and for which Fountain's contrivance could not be used conveniently without material alteration.

I think the doctrine of Mr. Justice Clifford and Judge Clark in *Crompton v. The Belknap Mills et al.*, 3 Fish., 536, is a sound one; that when the patent is for a peculiar combination of old devices the patentee cannot insist upon mechanical equivalents.

In general mechanics, the pinion may be the equivalent of the worm; but when one invention claimed is a combination of devices including the worm, another invention of a combination including the pinion differs from it in the very fact of using the pinion. It would be almost absurd to hold that a patent for a particular manner of using the worm would be infringed by a patent for a particular manner of using the pinion. We are taught at school that the lever, the windlass and the pulley are all one and the same in the mechanical principle involved; yet a combination of several devices, of which a pulley should be one, might not, in fact, even remotely

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resemble a combination in which a lever or a windlass should be used. I think it is a just ruling of the courts that mechanical equivalents cannot be insisted upon in inventions which consist of the mere arrangement of old devices.

The same seems to me to be the case with regard to the *purpose* for which a combination is invented. The invention of a new device is in general patentable without reference to the *object* it is designed to accomplish, and is good against any subsequent invention of the same device designed for any other object.

But it seems to me that this is not necessarily the case where the invention is merely of a combination of old devices. In such inventions the *purpose* aimed at, the *form* of the structure, its *portableness* or non-portableness, whether it is used as a fixture or carried in the hand ; are elements which, though any one of them might not determine its character with reference to another invention of a combination of devices, yet all, together, might unite to constitute it a different instrument.

I repeat, however, that I do not wish to be considered as concluding myself or the court in its decision at the final hearing. It is sufficient for me to say that the complainant has not made a *prima facie* case so strongly in his favor as to warrant the court in awarding a preliminary injunction ; and the motion is, therefore, denied. The order denying the motion will also dissolve the temporary restraining order which was granted on the 8th of August, and put the defendant under bond to account for the number of instruments manufactured by him and his receipts from their sale.

The bond of the defendant must also be given with reference to the great number of suits which complainant may be obliged to bring, in the event of a decree in his favor at the final hearing.

John B. Young and Hill & Ellsworth, for the complainant.

W. W. Crump, Daniel A. Grimsley, and James G. Field,
Attorney-General of Virginia, for the defendant.

Fairbanks v. Jacobus.

THADDEUS FAIRBANKS ET AL.

vs.

SAMUEL H. JACOBUS. IN EQUITY.*

E. & T. Fairbanks & Co., manufacturers of scales, alleged that J. made scales, by using, to make the iron castings thereof, the corresponding parts of a scale made by them, to form the moulds for those castings, and that the general shape and arrangement and color and external appearance of such scales were imitated from the Fairbanks' scale so nearly that only an expert in scales could distinguish the differences between them. The words "Fairbanks' patent" were cast on the scales made by both parties. All the patents which Fairbanks & Co. had had, had expired. Fairbanks & Co. applied for an injunction to restrain J. from using the words "Fairbanks' patent" on his scales, and from making or selling an imitation of Fairbanks & Co.'s scales: *Held*, that the application must be denied; that the words "Fairbanks' patent" were not a trade-mark; and that J. did not represent his scales to be of the make of Fairbanks & Co.

(Before JOHNSON, J., Southern District of New York, October, 1877.)

JOHNSON, J.

This motion is made for a preliminary injunction to restrain the defendant from the use of the words "Fairbanks' patent" upon platform scales, and from making or selling an imitation of Fairbanks' scales. This preliminary relief is sought substantially upon the grounds of imitation of the article made and sold by the plaintiffs, and of violation of the plaintiffs' alleged trade-mark. No question of violation of patent right is involved, for there is no claim by the plaintiffs that the scale complained of is, either in the whole, or in any part, an invasion of any existing patent owned by the plaintiffs. Indeed, it is not claimed, on the part of the plaintiffs, that any part of their scale alleged to be imitated is protected by any existing patent, or that any existing patent owned by them applies to their own scale, except a small and unessential, though useful, addition to the scale frame, by which the

* 14 Blatchf. C. C. R., 337.

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oscillation of the weighing beam is prevented, under certain circumstances. This addition, which the scale complained of does not possess, is secured by an existing patent to the plaintiffs, and bears the proper words required by statute, "patented Feb. 11, 1862," cast upon it.

The alleged imitation, as claimed by the plaintiffs, consists in this, that the scale complained of, as to the iron castings entering into its structure, was made by using the corresponding parts of a scale made by the plaintiffs, to form the moulds for those castings; and that the general shape and arrangement, as well as the color and external appearance, are imitated from the plaintiffs' scale so nearly that only an expert in scales could distinguish the difference between them. While, as a matter of fact, I should, after an inspection of the two scales, not think the discrimination so very difficult, yet it may be taken to be not only difficult, but impossible, to discriminate between them. That fact does not give the plaintiffs any right. Their patents, while they existed (and those concerned terminated in or about 1845), protected them in the essential structure of their invention, but exterior form, painted color, and such non-essentials, were not, and could not be, the subject of the patent, and did not, and could not, secure these to the plaintiffs. Much less could these be secured as a trade-mark, for a trade-mark is always something indicative of origin or ownership, by adoption and repute, and is something different from the article itself which the mark designates. An invention of structure a patent for the invention secures; a design is secured by a patent for that. Apart from these, any one may make anything in any form, and may copy with exactness that which another has produced, without inflicting any legal injury, unless he attributes to that which he has made a false origin, by claiming it to be the manufacture of another person. Any other doctrine is impossible to be maintained; for, otherwise, all the colors, all the unessential forms, could be monopolized as trade-marks, and exclusive rights would be created, not limited in time, as patents are, founded upon no public utility, and subject to no control but the will of the adopter. I think there is no difference in the cases on this subject. *Amoskeag Co. v. Spear*, 2 Sandf.

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S. C. R., 599 ; *Gillott v. Esterbrook*, 47 Barb., 455 ; *Newman v. Alvord*, 49 Barb., 588. I conclude, therefore, that there is no invasion of the plaintiffs' rights, in the purposed and actual identity, both of structure and appearance, in the scales in respect to which the defendant is sued, with those which the plaintiffs manufacture.

The case does not, however, rest here. On the base of the platform of what I may call the defendant's scale, are cast the words, "Fairbanks' patent," with the number indicative of size, 11, and upon the weigh beam are stamped the words "Fairbanks' patent." These are all the words which appear upon these scales, which can be the foundation of a charge of invasion of trade-mark, and, indeed, are all the words or figures upon any part of the scale. The same words appear on corresponding parts of the plaintiffs' scale, and, if they constitute a legal trade-mark, I shall assume, for the present purpose, that the defendant's scales violate it. Are these words a name of origin, or a name of quality, indicating structure ? Whatever they are in the one scale, they are, also, in the other. In some of the plaintiffs' scales their origin is signified by a quite different mark : "Fairbanks' Standard, made only by E. & T. Fairbanks & Co., St Johnsbury, Vermont." This is a valid trade-mark of the plaintiffs, but does not appear upon their scale produced in court. The other words must be understood as claiming that the thing on which it appears is protected by a patent. Especially is it thus localized and referred to the particular parts on which it appears, when, upon another part, is found the proper patent mark, which is necessary to support an action for an infringement, in the absence of notice, under section 4900 of the Revised Statutes. This gives significance to the use of the other marks, and makes the conclusion almost irresistible, that the purpose of the other words, on the beam and the frame, are to impress upon the incautious public, that the scale is the subject of a patent, and, therefore, not open to competition in manufacture or sale. I agree, on this point, with the position of the plaintiffs' counsel, in his printed points, that "it is an error to suppose that even the patentee may so stamp his articles and deceive the public after the expiration of his patent"—

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citing *Leather Cloth Co. v. Am. Leather Cloth Co.*, Am. Trade-Mark Cases, 688, 713. And I add, in confirmation of this view, the decision of Judge Cadwalader, in the Eastern District of Pennsylvania, October 4th, 1875, in *Consol. Fruit Jar Co. v. Dorflinger*, 1 N. Y. Weekly Digest, 427, upon reasons which seem to me quite satisfactory, and by which, on a motion for a preliminary injunction, I ought to be guided. It is, of course, no answer, that the defendant is, at least, guilty of the same fault, or even a greater. The plaintiffs fail to make these words out to be a lawful trade-mark, and, of course, cannot maintain upon them their claim for relief.

As to the charge that the defendant threatens various supposed wrongs to the plaintiffs, in imitating their manufacture, and that he represents his scales to be of the plaintiffs' make, the allegations are not so made out as to satisfy my mind of their substantial truth. *Byam v. Bullard*, 1 Curtis' C. C. R., 100. I doubt whether the defendant meant anything beyond the assertion of a right to use the words on the scale, which had been for many years openly used by him and his predecessors, under claim of right, and for some time, at least, and to some extent, with the knowledge of the plaintiffs or their predecessors.

Certainly, if the words "Fairbanks' patent" do not mean to assert the existence of a patent securing the scales, but only that they are made in conformity with, and embody the invention of, the expired Fairbanks' patent, they are free to all the world. What is not free is, to pretend that a scale is made by one person, which is, in fact, made by another.

In trade-mark cases, it is by no means of course to grant preliminary injunctions, even where the plaintiffs' case seems to be made out; and I shall, therefore, leave the further consideration of the case to the final hearing, when the questions as to the defendant's claim of right to the use of the words, "Fairbanks' patent," and the other questions of fact just referred to, and the unexplained circumstances and terms of the writing claimed to have extinguished the right of Chamberlain, can, if necessary, be further considered. The motion for an injunction must be denied, and the order heretofore

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made, granting an injunction till the decision of the motion, must be vacated.

Lucius E. Chittenden, for the complainants.

Reed & Drake, for the defendant.

ELI W. BLAKE

vs.

THE GREENWOOD CEMETERY. IN EQUITY.*

An application was made for a preliminary injunction, to restrain a cemetery corporation from using a stone breaking machine, in infringement of a patent. The machine was used to break stone to keep in repair the roads of the cemetery. The defendants set up a license. The plaintiff exercised his monopoly by granting licenses to use his machine. The defendants offered to pay into court the amount of the license fee on its machine, to abide a final decision on the question of the existence of a license : *Held*, that, on such payment into court, the application must be denied.

(Before BENEDICT, J., Eastern District of New York, October, 1877.)

BENEDICT, J.

This action is brought against the Greenwood Cemetery, to obtain an injunction and damages for the use, by the defendants, of a certain stone breaking machine. The case is now before the court, upon the plaintiff's motion for a preliminary injunction to restrain the defendants from using the machine during the pendency of the action. The facts are not in dispute. It is not denied that the machine in use by the defendants is an infringement upon the plaintiff's patent, as set out in his bill, and the validity of the patent is not disputed. As to these questions, there could be no dispute, for, not only this patent, but this identical machine, has formed the subject of a former action in this court, brought by this plaintiff against the maker of this and three similar machines,

* 14 Blatchf. C. C. R., 342.

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in which action the validity of the plaintiff's patent was declared, and the machine in question decided to be an infringement. That decision having been since affirmed by the Supreme Court of the United States, upon appeal (*Blake v. Robertson*, 4 Otto, 728), furnishes the law of this case in respect to the question of infringement. But, in that action, brought, as it was, against the maker of the machine, to recover damages for its construction, with others, and in which the damages were fixed in pursuance of a stipulation between the parties in respect thereto, inasmuch as the evidence offered to prove the damages failed to show any amount of damages sustained by reason of the construction of the machines complained of, the recovery was limited to one dollar, as nominal damages. In this action, that former action, together with the payment of the one dollar there awarded, is set up by way of defence, and it is contended that the defendants, by reason of the said recovery, are entitled to use the machine in question, as a licensed machine, without further payment to the patentee. Pending the determination of the question thus raised, which the defendants are entitled to have determined upon final hearing, and not upon this motion, there is a difficulty in granting a temporary injunction, arising out of the nature of the use to which the machine in question is devoted. The machine complained of is a powerful and expensive stone-crusher, used solely for the purpose of breaking the stone needed to keep in repair the roads of that cemetery called Greenwood, where are the graves of nearly two hundred thousand dead—the dead of every State in the Union, and of almost every nation on the earth. Some nineteen miles of roads border the burial lots of this great city of the dead. These roads are constantly travelled by the living, upon the saddest of all their errands. There is no part of the cemetery which may not be, at any moment, required to be used for the purposes of interment, and the necessity is absolute, that its ways and paths be unimpeded and in good repair. The duty of maintaining these roads belongs to the defendants, but it is, in no proper sense, a private obligation. The machine in question cannot fairly be said to be employed for the profit of any one, but for the con-

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venience of the public, to the end that the people, without annoyance or obstruction, may bury their dead. Such a use, it is plain, should not be interfered with by the court, unless such intervention by the court is an absolute right of the plaintiff. In this stage of the case, the plaintiff can have no such absolute right. His papers show that he does not derive profit for his patent by using his machines, but that he charges a fixed royalty or license fee, according to the size of the machine. The amount of this royalty upon the machine in question the defendants now offer to pay into court, to abide the decision of the question raised by their answer. Such a payment of his royalty will fully protect the rights of the plaintiff; and the offer to make the payment renders it impossible for the plaintiffs successfully to contend that a temporary injunction is necessary to prevent irreparable injury to him. The motion must, therefore, be denied, provided the defendants pay into the registry of this court, to abide the event of this action, the amount of the plaintiff's royalty upon the machine in question.

Henry T. Blake, for the complainant.

Benjamin E. Valentine, for the defendants.

JOSEPH MAGOUN

vs.

THE NEW ENGLAND GLASS COMPANY. IN EQUITY.

Where the infringing articles were constructed and used with the knowledge of the complainant, and with his consent, and were constructed by him or under his direction, and put into defendant's factories at its expense while in its employment, and were used under his direction before and up to the date of his application for a patent: *Held*, that such a state of facts operates as a special license to use such specific articles.

(Before SHEPLEY, J., District of Massachusetts, October, 1877.)

Goodyear Dental Vulcanite Co. v. Davis.

SHEPLEY, J.

The defendants are not proved to have used any moulds of the construction set forth in complainant's patent, No. 63,633, except such as were constructed and used with the knowledge of the complainant, and with his consent, and were constructed by the complainant or under his direction, and put into defendant's factories and used under his direction before and up to the date of his application for the patent. Such construction of the moulds at defendant's expense while complainant was in their employment, operates as a special license to continue to use those specific moulds.

No infringement being proved, the bill is dismissed with costs.

Geo. E. Belton, for the complainant.

Geo. L. Roberts & Bros., for the defendant.

THE GOODYEAR DENTAL VULCANITE COMPANY

vs.

CHARLES G. DAVIS.

SAME

vs.

DEFENDANTS IN SIXTY-SEVEN OTHER CASES. IN EQUITY.*

The decision of the Supreme Court in *Smith v. Goodyear Dental Vulcanite Company*, 3 Otto, 436, must be considered as final, not only as to the validity, but as to the construction, of the Cummings patent for an improvement in artificial gums and palates.

The article patented by Cummings being a set of artificial teeth, consisting of a plate of hard rubber or vulcanite, with teeth, or teeth and gums, secured thereto in the manner described in the patent, by embedding the

* Affirmed by Supreme Court, 12 Otto, 222.

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teeth and pins in the vulcanizable compound, so that it should surround the teeth and pins while the compound is in a soft state, before it is vulcanized, and so that, when the compound is vulcanized, the teeth are firmly secured by the pins embedded in the vulcanite, and there is a tight joint between the vulcanite and the teeth : *Held*, that a corresponding plate of celluloid instead of vulcanite does not infringe the patent.

To infringe the patent there must be an equivalent of the plate of hard rubber made and manipulated by a process equivalent to the described process of compounding a gum with sulphur, and applying it, and moulding it, and incorporating it with the teeth and gums when in a soft state, and then subjecting it to heat to harden and vulcanize it.

The court prefers to adopt that construction which, although limiting the scope of the claim, secures to the inventor all that he actually invented and no more, rather than to adopt one which would render the patent invalid, or one which, being broader than the invention, would be a barrier in the way of future progress and invention.

(Before SHEPLEY, J., District of Massachusetts, October, 1877.)

SHEPLEY, J.

The patent and its reissues granted for the invention of John A. Cummings of "an improvement in artificial gums and palates," or, as described in the claim, "the plate of hard rubber or vulcanite, or its equivalent, for holding artificial teeth or teeth and gums, substantially as described," have been the subject of extensive and prolonged litigation. Since the affirmance by the Supreme Court of the United States in *Smith v. Goodyear Dental Vulcanite Company*, 3 Otto, 486, of the decree of the circuit court in the test case of *Goodyear Dental Vulcanite Company v. Smith*, the validity of the reissued patent has been fully established. The decision of the Supreme Court in that case must be considered as final, not only as to the validity, but as to the construction of the patent, which was carefully considered in that case, both in the circuit and the appellate court, as it had previously been in the Wetherbee and the Gardner cases.

In the case of *Goodyear Dental Vulcanite Company v. Smith*, in the first circuit, this court decided that the patent was not for a process or art, but for the new product resulting from the manipulation by the described new process, and for one of those products in which the process so inheres that the described product can only be made by the described

process, and that the invention was one in which the process by which it is made is a part of the substance, the thing made, the manufacture. What the new product was, and wherein the novelty consisted in the process, we shall hereafter have occasion to consider. In the opinion (by Mr. Justice Strong) in the Supreme Court in the same case, the invention patented is thus described: "The invention, then, is a product or manufacture made in a defined manner. It is not a product alone separated from the process by which it is created. The claim refers in terms to the antecedent description, without which it cannot be understood. The process detailed is thereby made as much a part of the invention as are the materials of which the product is composed."

If the defendants, by practising the process described by Cummings, using the materials described by him, or such materials as are equivalents and were known equivalents at the date of his invention, in the described process, or such as, in the process, are mere substitutes of one material for another without any change in the process or in the effect, have produced a product the equivalent of his in the described properties and for the described functions, then, and only then, have they infringed.

The product, the new article of manufacture patented, was a set of artificial teeth, consisting of a plate of hard rubber or vulcanite, with teeth or teeth and gums, secured thereto in the manner described in the patent, by embedding the teeth and pins in the vulcanizable compound, so that it should surround the teeth and pins while the compound is in a soft state before it is vulcanized, so that when the compound is vulcanized the teeth are firmly secured by the pins embedded in the vulcanite, and there is a tight joint between the vulcanite and the teeth. This product was a new product, not alone because it substituted one material for another, the material, vulcanite, rigid enough for purposes of mastication, yet pliable enough to yield a little to the mouth, and at the same time light and inexpensive, in place of the hard, unyielding, expensive and heavy metals previously used, but also in the additional fact that it was made by a process which, taken as a whole, was a new process, by the use of

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which process "the teeth can easily be baked into the gums, which form one piece with the plate."

The next question to be considered is, what was there new in the described process? The whole process of forming and making a set or case of teeth, including the plate, gums and teeth, is fully described in the Cummings patent, and this process is so fully described in the case of *Vulcanite Company v. Smith* that it becomes unnecessary to repeat it here. It is sufficient to state that in view of the state of the art there was nothing substantially new in that process until we reach this part of the description: "The teeth are provided with pins projecting therefrom in such manner that the rubber which is to constitute the plate will close around them, and by means of them hold or secure the teeth permanently in position. The plaster-mould, with the teeth adhering therein, as just described, is now filled with soft rubber, a little at a time, pressed in with the finger, or in any other convenient way; and care is to be taken that the rubber is made to completely fit into the cavities and around the protuberances, including the pins, and is filled in to the thickness or depth desired to form the plate. I then lock the rubber plate in position by shutting the other half of the plaster-mould over it to insure its retaining its exact form while warming, and then heat or bake it in an oven, or in any other suitable way. The soft rubber or gum, so inserted in the mould, is to be compounded with sulphur, rubber, etc., in the manner prescribed in the patent of Nelson Goodyear, dated May 6th, A. D. 1851, for making hard rubber, and is to be subjected to sufficient heat to vulcanize or harden it, substantially as directed in that patent. It is also to be colored in imitation of the natural gums, by mixing it with vermilion, or other suitable coloring matter, while in the soft state. After the plate has been heated sufficiently to harden it or convert it into hard rubber or 'vulcanite,' so called, the mould is removed and the plate is polished ready for use."

It will thus be seen that an essential element of the described product is "a plate of hard rubber or vulcanite," in which the teeth are embedded; and an essential ingredient in the described process is the soft rubber or gum, compounded

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with sulphur, rubber, etc., in the manner prescribed in the patent of Nelson Goodyear for making hard rubber, and that an essential step in the described process is the subjecting the compound of soft rubber or gum with sulphur "to sufficient heat to vulcanize or harden it, substantially as described in that patent," (*i. e.* the patent of Nelson Goodyear, of May 6, 1851.)

The equivalent of that product thus made by that process must, therefore, contain the equivalent of the plate of hard rubber, made and manipulated by a process equivalent to the described process of compounding a gum of sulphur, and applying it, and moulding it, and incorporating it with the teeth and gums when in a soft state, and then subjecting it to heat, to harden and vulcanize it, in the manner described in the Goodyear patent, or in some equivalent manner, or by some equivalent process.

The defendants use, in making their set of artificial teeth, a plate made of "celluloid," substantially a new material, discovered and patented since the date of the Cummings invention. This substance is compounded of cellulose, or vegetable fibre, and camphor. No rubber or other equivalent gum, and no sulphur or equivalent for sulphur in the process, enter into its ingredients. It is not a vulcanizable compound, and contains no vulcanizing agents in its composition. The camphor in its composition, instead of being a vulcanizing agent, causes the composition to soften instead of harden under the influence of heat. The product when compounded, and before being subjected to heat, is not soft, like soft rubber under like conditions, but hard. In the manipulation of this material, the process of making a set of teeth, composed of the plate and teeth and gums, is an entirely different process from the process described in the Cummings patent, when compared with that part of the Cummings process which was new in the state of art, and the novelty of which part gave to the Cummings process, when considered as a whole, the ingredient of novelty and patentability. It is not placed in the mould in a soft, plastic condition, "a little at a time, pressed in with the finger, or in any other convenient way," but in a hard, rigid condition, like horn, or bone or

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ivory. It is then subjected to heat, not to vulcanize or harden, but to soften it. It afterward, on being cooled or restored to its original temperature, returns to its original condition as a hard substance, as when first placed in the mould. No vulcanizing process, or even process of hardening by heat, and no equivalent for any such process, is practised. In the light of these comparisons it appears evident to the court that the use of celluloid in the manufacture of sets of artificial teeth, as practised by the defendants, and the manufacture itself, the set or plate of teeth, differ as much, both as to process and product, from the process and product described and claimed in the Cummings patent, as that process and that product differed from those previous manufactures which existed before the Cummings invention, and were unsuccessfully relied upon as anticipating it.

It is true that this construction of the dental vulcanite patent narrows the scope of the patent. It is urged, with much force, that if this be the true construction, it would follow that if an inventor invented at the same time a new process and a new product, he would, by such a construction of his patent, lose the benefit of it, unless the infringer used his process or an equivalent one, to produce his product or an equivalent one. One answer to this objection is that in the case supposed the inventor might patent both the new process and the new product, and thus fully protect himself. In its application to this case it is believed that the objection is without force, for the reason that such a construction of the claim of this patent is the only one which makes the claim a valid claim. To abandon the construction which makes the product patented the new manufacture, when made by the described process, is to abandon that which gives it its vitality. It is better to adopt that construction which, although limiting the scope of the claim, secures to the inventor all that he actually invented and no more, than to adopt one which would render the patent invalid, or one which, being broader than the invention of the patentee, would be a barrier in the way of future progress in discovery and invention.

Edward N. Dickerson & Benjamin F. Lee, for the complainants.

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William D. Shipman, Henry Baldwin Jr., and E. Luther Hamilton, for the defendants.

ANSON SEARLES ET AL.

vs.

ABRAHAM R. VAN NEST ET AL. IN EQUITY.

The reissued letters patent, Number 5,490, dated May 6th, 1873, granted to the complainants for "improvements in whip-sockets for carriages," held to be valid, and that the defendants have infringed the same.

The reissue is for the same invention described in the original patent.

(Before WHEELER, J., Southern District of New York, October, 1877.)

WHEELER, J.

This cause has been heard on bill, answer, replication, proofs and arguments. The orators are owners of a patent for improvements in whip-sockets for carriages, issued as letters patent No. 70,627, dated November 5, 1867, to the orator Scott, and reissued as letters patent reissue No. 5,400 dated May 6th, 1873, to both orators, and which they claim the defendants are infringing.

The defendants allege that the reissued patent is not for the same invention as the original, and that it is, therefore, void; that what they are doing, and what is claimed to be an infringement, is covered by a patent issued to Henry M. Curtis and Alvah Worden, dated October 22, 1867, prior to the date of Scott's patent, and they deny that what they are so doing is any infringement of the orators' patent.

From the proofs, it appears that Scott is the original and first inventor of the device set forth in his patent. By the statutes, only persons who have "discovered or invented any new and useful art, machine, etc., not known or used by others before his or their discovery or invention thereof," are entitled to patents for their inventions and discoveries, and the fact "that the patentee was not the original and first inventor or dis-

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coverer of the thing patented," is a good defence to any suit founded on the patent.

Under these provisions, a patent is not conclusive that the patentee has a right to it, nor that no one else has a right to a patent for the invention described in it ; but the right, where there are conflicting patents, is left to be settled by determining who is in fact the first inventor. In this case, settling the fact that Scott was the first inventor, has, accordingly, as between these parties, settled that he was the rightful patentee of that invention.

On looking through his original patent in the light of what was before known, and of the drawings and model, it appears that his invention consists in contriving a whip-socket with its sides curved inwardly toward the bottom, and a lever in one side, pivoted near the middle and weighted on its outside, and curved toward the other side of the socket at each end, and shaped there to fit the whip, so that the weight of the whip would crowd the lower end outward, and thereby move the upper end inward until the whip would be clutched between them and the opposite side of the socket, and held steady until withdrawn, when the upper end would swing outward and the socket remain open, ready to execute it again. In the specification and claim the invention was imperfectly described, and some of its essential features were not mentioned at all. In that condition, the patent was just such a one as the statute provides may be surrendered, and be reissued to cover the actual invention. When reissued, this patent was not for anything outside of what could be found in the original, when looked for in all the parts and accompaniments of it. Nothing appears in the reissue that was not somewhere in the original. The only change made was, that what was there in some shape before, was set forth more methodically and directly in the specification, and more extensively and definitely in the claims. This was precisely what the law authorized, and the validity of the patent was not thereby affected.

The device which the defendants are using is a socket curved inwardly toward the bottom, and one side of it is a lever pivoted near the middle, made heavy on the outside and

curved toward the other side at each end, and shaped to fit the whip, so that the weight of the whip will crowd the lower end outward, and thereby throw the upper end inward until the whip is clutched between them and the other side of the socket, and held steady until removed, when the upper end will swing outward and the socket remain open, ready to receive the whip again.

A comparison of these devices shows that they accomplish the same result in substantially the same way. In the defendants' contrivance the lever forms one side of the socket, and what there is left without it is only one-half of a socket, and the appearance of the two things is thereby made to be quite different ; but in the orators' device, although almost the whole of a socket beside the lever is there, in use, only the side of it opposite the lever is employed, which is the same part as that employed by the defendants, and the part is employed in the same manner, and for the same purpose, and to the same effect as that part of the defendants' is. In that respect the defendants have taken away the superfluous part of the socket that the orators retained without using. The lever of the defendants is weighted outward by metal composing it and its shape, while that of the orators was by the addition appended to its outside ; but the difference in the mode of weighting the lever is not material in the use, nor made so in the patent.

In convenience and appearance, the defendants' socket would, in the minds of most persons, probably be an improvement upon the orator, and perhaps it is such an improvement that the patent under which they are operating will cover it ; but whether it is so or not, while they employ the patentee's device of the orators in what they use, the use is none the less an infringement.

Let a decree be entered for a reference to a master, an account, and an injunction, according to the prayer of the bill.

J. P. Fitch, for the complainants.

C. J. Hunt, for the defendants.

Sprague v. Adriance.

WILLIAM SPRAGUE ET AL.

vs.

JOHN P. ADRIANCE ET AL. IN EQUITY.

Abandonment is a fact and not a conclusion of law.

Where the evidence showed that the inventor, although allowing more than four years to elapse from the date of his invention before applying for a patent, nevertheless kept the invention from the public, and it appearing also that he was in straitened circumstances: *Held*, that, under the circumstances of the case, an abandonment was not proved.

The rule, that in cases of delay in applying for patents, the intervening rights of other inventors who in the meantime have devised and patented the same thing, should be protected against the delaying inventor, does not apply to the case of the complainants, who did not know of or acquiesce in the acts of the intervening inventors.

The case of *Consolidated Fruit Jar Company v. Wright*, 4 Otto, 92, distinguished.

Whether, if the first inventor is estopped by conduct of his own, his assignees would be, unless shown to have been cognizant of it, *quare*.

The scope of the patent is fixed by what was known at the date of the completed invention, and not by what was known at the time when the application was filed.

The first and second claims of reissued letters patent, Number 3,372, granted to Frederick Nishwitz, April 13th, 1869 (original patent dated February 10th, 1858), for improvement in harvesters, *held* valid.

(Before WHEELER, J., Southern District of New York, October, 1877.)

WHEELER, J.

This suit is brought for relief against an alleged infringement of reissued letters patent No. 3,372, Division B, granted to Frederick Nishwitz, and now owned by the orators, for an improvement in mowing-machines, and has been heard on pleadings, proofs and argument. It is found as matter of fact that the invention was made in 1853. The application for the original patent was filed January 12th, 1858.

The defences set up are that Nishwitz is not the first inventor ; that he abandoned his invention to the public before applying for his patent, or so conducted himself with reference to it that he was estopped from claiming a patent for it, or any rights under the patent ; that the reissue is not for the same invention set forth in the original, and that the defendants do not infringe.

Abandonment itself is a fact, and not a conclusion of positive law, statutory or common, arising from any prescribed state of facts. The lapse of time between the invention and the application was about four years and a half, and large, but there was no fixed limit within which the application must be made ; it was not so great as in many cases where patents have been upheld ; and the straitened and other circumstances of the inventor were such that, although it was some and quite strong evidence in itself of an abandonment, it is explained away, and, taken all together, the evidence not only fails to show any abandonment in fact, but on the contrary, shows satisfactorily that he cherished and carefully kept his invention to himself, away from the public, for himself.

During that time other inventors entered the same field, and some of them occupied some of nearly, if not exactly, the same ground, and obtained patents for some of nearly, or quite, the same things now claimed under his, and it is with much plausibility urged that after what occurred he and those claiming under him should in equity be estopped from maintaining the claims now made, and the language of the court in *Consolidated Fruit Jar Company v. Wright*, 4 Otto, 92, is especially relied upon in support of that position. With great justice, to the apprehension of all, it is there well and authoritatively said with reference to this subject, as had been many times by many courts before said with reference to others, that he who is silent when he should speak must be silent when he would speak, if he cannot do so without a violation of law and injustice to others. It is to be observed, however, that the case was made to turn upon the defence of purchase, sale or prior use of the invention for more than two years prior to the appli-

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cation, with the consent and allowance of the inventor, provided for by sections 15 of the act of 1836, and 7 of the act of 1839, and that of an abandonment in fact ; and what was said was apparently said with reference to the justice of those defences, rather than with reference to an independent defence founded upon an equitable estoppel. But if such independent defence was alluded to, the proposition was carefully made to include, as always before, that he who is required to be silent on account of not having before spoken, must have before remained silent when called upon to speak. In that case the inventor appears to have seen others making use of his invention, without claiming it himself, when he must have known that if he did not make known his claim then, and should successfully do so afterward, they would be damned. He was directly called upon by the circumstances to speak, and, not having spoken, was situated like those witnessing transfers of their property by others without making known their ownership, who have always been estopped from setting it up afterward.

But in this case it is not shown that Nishwitz knew others were making any advancements or investments of either capital or skill on faith that the ground he had begun to occupy was open to all, or that they would not have made them, if they had known all he could have told them. He was never called upon to speak, and so was never silent when he should have spoken. Therefore this rule, just as it is in itself, does not apply to him.

There might, perhaps, be question whether, if the inventor himself would be estopped by conduct of his own, his assigns would be, unless shown to have been cognizant of it, as innocent purchasers of other property must be, in order to be estopped, but that question does not arise here, as the inventor himself is not affected.

The statutes allowed a reissue of the patent on certain grounds for the same invention set forth in the original. The grounds of the application, and the identity of the invention were so made to appear to the Patent Office that the reissue was granted, and it is valid against the objection made in this respect, unless the difference in the inventions is shown.

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The original specification and model are shown by copies. The language in which the object of the invention is set forth has been somewhat changed ; more full descriptions of some parts of the invention shown by the model have been inserted in place of others, and some so shown have been described in the specification that were not there described before ; but in fact nothing has been added to the specification that did not appear before somewhere. The claims have been changed, as the statute warrants, when the invention is in reality the same.

From these considerations it results that the patent is valid for something. It was said in argument, in behalf of the defendants, that the production patented must be compared with things as they were at the time of the application, and, in behalf of the orators, that the comparison must be made as of the time of the invention, in order to determine the scope of the patent. The statute authorized granting patents for new and useful inventions, without other limit. It seems to be quite obvious that the extent of an invention must be ascertained by comparing what the inventor produces with what was before that time known. If he is entitled to a patent at all, he is by the statute entitled to one for that invention so ascertained, and there is no provision for cutting it down to less on account of subsequent inventions, and it cannot be so cut down without engrafting an addition on to the statute by a judicial construction never before given to it.

At the time Nishwitz made this invention there was, so far as shown by this record, as has been pointed out by counsel or observed, no mowing-machine, except Manny's, under his patent of 1851, that had its cutting apparatus attached to the forward part of a frame extending forward toward the ground from and swinging by an axle supported by two wheels, and none at all that had this apparatus attached to any frame swinging with or upon an axle so supported separately from the draft-pole, and none that had a lever to raise or lower the cutting apparatus resting on the draft frame or pole. Manny's had a cutting apparatus hung to a frame so extending forward and swinging, but the draft-pole was hinged to the corner farthest from the grass to be cut and next to the

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ground, and carried forward to another pair of wheels, to which the team was attached, and the main wheels ran directly behind the cutters. Sylla and Adams, if they had made the invention patented to them September 20th, 1853, as is probable, had a mower arranged in a manner somewhat similar. Ketchum had a one-wheeled mower, with the cutting apparatus resting on the ground at the side of the wheel. N. T. Allen had a harvester and thrasher, not a mower, with a frame mounted on two wheels and cutting apparatus suspended by rods from it at the front end. Haines had a mower, and there was an English patent for one, with frames so mounted and cutting apparatus suspended by rods from the rear end. Allen's, Haines's, and the English patent each had the cutting apparatus extending laterally toward the grass or grain to be cut. Manny's mower had an arm projecting forward from the frame, and adjustable on the forward carriage, and Sylla and Adams's contrivances for straightening up or bending down the line of the frame and draft to raise or lower the cutting apparatus. The English patent had a windlass and Allen's reaper a lever for the same purpose. Haines's mower afterward had a lever resting on the main frame back of the axle, and not on the draft, also for the same purpose. It is claimed for the defendants that the evidence shows this lever was in use on the Haines machines at that time, but the proofs are very conflicting, and it does not fully appear that it was, as is required to establish the defence of priority of invention or use provided by section 15 of the act of 1836, and the decisions in reference to it.

Nishwitz arranged a mower having two wheels with an axle and a frame extending forward from and swinging with it to support the cutting apparatus, and a draft-pole hinged to and vibrating on the axle over and separately from the frame, and provided for raising, lowering and adjusting the height of the cutting apparatus by a lever of the second order pivoted on the draft-pole to draw up or let down a rope or chain passing over a pulley to the frame, adjustable by a pawl. Hinging the draft-pole and frame in that manner upon, and so as to pivot about, the main axle separately, allowing the frame and cutting apparatus to rise and fall

without the pole doing so, and arranging the lever, chain and pawl, with which to raise and lower them when desired, were wholly new features in such machines, and would have been so even if Haines had then had in use such a lever as he employed afterward. His cutting apparatus was not carried by any frame vibrating separately upon the axle, and if it was carried by an equivalent his lever was not pivoted upon nor did it rest on the draft-pole nor anything supported by the team to sustain it. By his arrangement the team might to some extent support the lever in raising the cutting apparatus, but it would only be after the pole had been thrown up as far as the tackling would let it go, and then by holding it with their weight from going higher, not sustaining it with their strength, as in Nishwitz's arrangement. These improvements all appeared in Nishwitz's original specification and model. His original patent did not cover them, but his reissued one, now owned by the orators, does in its first and second claims.

The defendants have the draft pole and frame supporting the cutting apparatus, each pivoted on and vibrating separately about the axle supported by two wheels, and the lever of the second order pivoted on and supported by the draft-pole, and a part of a circle about the pivot end of the lever for the chain to pass over, equivalent for that purpose to a pulley, and the chain passing over the circle to the frame carrying the cutting apparatus, and a ratchet, equivalent to the pawl, for adjusting the place of the lever, all for the purpose of raising, lowering and adjusting the height of the cutting apparatus. Thus the defendants appear to have taken the whole of Nishwitz's invention.

It is said that the object of his invention was to adjust the height of cut, and that the defendants use other means, and not these contrivances, for that purpose. But another object of his invention was to adjust the height of the cutting apparatus in passing obstacles and moving the machine from place to place. The defendants use them for these purposes, and the evidence tends to show that they are used to some extent in their machines for adjusting the height of cut also. To what extent they are used in either respect, either to the

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profit of the defendants or damage of the orators, is not now to be determined. Either use, as these matters are now viewed, appears to be an infringement. The extent of the use is a proper matter to be determined on an accounting.

Let a decree be entered, establishing the validity of the first and second claims of the patent, that the defendants have infringed the same, and for an injunction and account accordingly.

George Gifford and Benjamin F. Thurston, for the complainants.

George Harding, for the defendants.

JOHN W. JONES

vs.

LOUIS McMURRAY. IN EQUITY.

Where the Supreme Court declared certain patents void, for want of novelty, and they were afterwards reissued, and suit was brought for an infringement of the reissues: *Held*, that the reissues being for the same invention as were the original patents, they would be void for want of novelty upon the same grounds as the original patents. *Held*, also, that if it be admitted that there is something new and patentable in the reissues, which was not in the original, the reissued patents would be void because not for the same invention as the original patents.

(Before BOND, J., District of Maryland, October, 1877.)

BOND, J.

As this cause involves large pecuniary interests, and is also of much importance to the public at large, the court has very carefully read and considered the whole testimony, which is so voluminous that counsel could refer to it only in their arguments, or but partly read it.

This bill is preferred by complainant to establish the validity of four letters patent relating to inventions for the canning and

preservation of green corn. The first patent, No. 34,928, dated April 8th, 1862, and its reissue, No. 7,067, dated April 18th, 1876, cover the invented product; while the second patent, No. 35,274, dated May 13th, 1862, and its reissue, No. 7,061, dated April 18th, 1876, relate to the process for making the product.

The Supreme Court of the United States, in the case of *Sewall v. Jones*, 1 Otto, 171, determined that the original patents above named, Nos. 34,928 and 35,274, were void for want of novelty, and this court is saved the labor of investigating their validity; but the complainant here claims that though the original patents were declared invalid by the Supreme Court, he is entitled to the relief he asks because he has surrendered Patents Nos. 34,928 and 35,274, and the Commissioner of Patents has reissued the same to him because the originals were invalid merely "by reason of a defective or insufficient specification," under Sec. 4,916 Rev. Stats. U. S. He, therefore, so far as this part of his case is concerned, relies upon the reissued patents, Nos. 7,061 and 7,067, which relate to both the process of canning and to the product of the canning process.

While we are of the opinion that the decision of the Supreme Court in *Sewall v. Jones* is much broader than the complainant admits, and that it goes to the whole invention then and now claimed by Jones in the patents we are here considering, and that it determined that both the process and product now claimed by Jones was the invention of Appert in France and Durand in England more than sixty years ago, and held that Jones's patents were void for want of novelty, and not merely invalid for want of a proper specification and description of Jones's claim, nevertheless, since the Commissioner of Patents has reissued the patents to Jones, we would give him the benefit of them could we discover in what respect they differed essentially or substantially from the originals which the Supreme Court has decided were not novel. There is no essential difference, however, between the process described in Patent No. 35,274 and its reissue, No. 7,061. The first recites that, after some difficulty found in preserving the green corn without drying, the inventor removed the corn

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from the cob and boiled it, but that this process, the corn being broken by removal from the cob, dissolved the juices and made the corn insipid, and that, finally, he removed the corn from the cob, packed the kernels in cans, hermetically sealing them, and boiled them till the corn was cooked. The Supreme Court says, in *Sewall v. Jones*, this is not new.

In his reissued patent the complainant states that he takes tender green corn and scrapes it from the cob so as not to detach the inner ends of the kernel, which, with the pieces and softer parts of the corn, he cooks together, and then proceeds with the old process of Appert for cooking and sealing. He claims as his invention "the process described of separating and obtaining the nutritious and edible parts of the corn, and boiling them in a liquid composed wholly or mainly of their own juices."

No one ever cut green corn from a cob who did not accomplish exactly what this claim describes, and no one under the process described in Patent 35,274, which required the corn to be removed from the cob, could so remove it without breaking the kernels, and when he proceeded to cook in a can, as the patent required, he would find necessarily more or less of the juices with it. The reissue does not claim that the juices only should be used in the cooking.

The process described in the reissue is substantially that of the original patent; but if we admit there is something new and patentable in the reissued patent which was not in the original, the patent is void, because it is not for the same invention as the original. It may be the subject of a new patent, but cannot be a reissue of an old one, and that, too, of an old one which has been adjudged invalid by the Supreme Court for the want of novelty.

But the fact is, that Jones, as far back as May, 1862, had applied for and obtained a patent, No. 35,346, which described the cutting off the corn from the cob in very much the same words as does the reissued patent, No. 7,061.

This patent, No. 35,346, Judge Clifford held, and rightly, to be substantially the same with No. 35,274, now under consideration.

It cannot, therefore, be claimed that the reissued patent

In re John J. Squire.

contains anything which the original did not, and the original, says the Supreme Court, is void for the want of novelty.

The two remaining patents which the bill alleges the defendant has infringed are Nos. 51,379 and 54,170, which describe a curved knife for the removal of the corn from the cob. We are of opinion that these two patents are also void for want of novelty. The knife described in the first patent is simply a curved knife provided with a gauge, for the purpose of removing corn from a cob. The second patent makes the gauge adjustable. This, we think, the defendant has shown to be old.

The knife differs nothing in principle, and little in construction, from the knife known as the "spoke-shave," or from the paring-knife of Adam Oot. Defendant's record, 606.

But even if we admit the validity of these patents, we have looked in vain for any proof that the defendant has infringed them by using complainant's knife; on the contrary, the complainant's proof (Record, 25-42) shows that the defendant used a different knife entirely.

For these reasons, and without considering other and, as we think, equally fatal objections to the complainant's case, we think the complainant's bill should be dismissed with costs, and will sign a decree to that effect.

Benjamin F. Butler, Archibald Stirling Jr., David Fowler, and T. C. Mattocks, for the complainant.

E. R. Dickerson, C. C. Beaman, I. Nevitt Steele, and J. H. Howard, for the defendant.

IN RE JOHN J. SQUIRE. IN EQUITY.

A bill filed under section 4,915 of the Revised Statutes is an original and not an appellate proceeding; and in such a proceeding it is proper to take the testimony before an examiner.

The practice, in such a proceeding, is governed according to equity rules, and a party contesting the petitioner's right to a patent cannot confine

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him to matters existing of record in the Patent Office, or in the Supreme Court of the District of Columbia.

Section 4,915 of the Revised Statutes must be construed to mean that when an application is refused by the Commissioner (as in cases of interferences), or by the Supreme Court of the District of Columbia (as in other cases), the applicant may have remedy by bill in equity.

Such a case having been presented by a bill in equity and notice given, as prescribed, the subsequent proceedings must be such as pertain to equity causes.

The court will receive all the proceedings had before the Patent Office, and, when an appeal lies to the Supreme Court of the District of Columbia, all the proceedings had before that court, together with all new and additional testimony taken in the equity proceedings.

(Before TREAT, J., Eastern District of Missouri, October, 1877.)

John J. Squire and one McDonough were in interference in the Patent Office upon their several applications for patents. The decision of the Commissioner was adverse to Squire, who thereupon brought a bill under section 4,915 Rev. Stat., and gave the proper notice to McDonough, who appeared and answered. The question arising whether Squire could introduce testimony in this proceeding other than that given before the Commissioner, Squire moved for the appointment of a special examiner, under the amended 67th Rule, which motion was opposed by McDonough.

TREAT, J.

It appears that Squire and McDonough made separate application for a patent substantially for the same device. The Examiner of interferences decided in favor of Squire. Upon appeal, the board of Examiners-in-Chief, sustained by the Acting Commissioner, reversed the decision of the Examiner of interferences. Thereupon Squire instituted this suit, under section 4,915 of the United States Revised Statutes, for a decree in his favor for a patent for his invention, as specified in his claim, or for such part thereof as he may be found entitled to. The petitioner now moves for an examiner to take testimony, to which motion McDonough, who has received due notice, being the "adverse party," appears and objects, on the ground that the proceedings in this suit are substantially an appeal from

In re John J. Squire.

the Patent Office, to be determined solely by the matters of record in that office, with no new or independent testimony admissible. It is, therefore, for this court to decide what, under the United States Patent Laws, is the appropriate mode of proceeding in such a case, and what testimony can be received. Section 4,886 prescribes for what, and under what, facts and circumstances, a patent may be procured. Section 4,893 states what preliminary steps are to be had for the purpose. Section 4,904 provides the course to be pursued when, in the opinion of the Commissioner, an interference may exist. The Primary Examiner must first pass upon the case; then, if appeal is had, the board of Examiners-in-chief must decide. Section 4,909 gives the right of appeal in cases like that now before the court to the board of Examiners-in-chief, and section 4,910 from said board to the Commissioner in person. There is a marked distinction running all through the patent laws between cases where interferences are supposed to exist and where applications for patents are made, no interferences appearing. Thus section 4,911 reads: "If such party" (applicant), "*except a party to an interference*, is dissatisfied with the decision of the Commissioner, he may appeal to the Supreme Court of the District of Columbia, sitting in banc." Section 4,915 must be construed distributively, viz: When application is refused by the Commissioner (as in cases of interferences), or by said Supreme Court (as in other cases), "the applicant may have remedy by bill in equity, and the court having cognizance thereof, on notice to adverse parties, *and* other due proceedings had, may adjudge," etc.

Such a case having been presented by a "bill in equity," and notice given as prescribed, the "due proceedings" to follow must be such as pertain to equity causes. Reference to section 4,918 supports this view, for it provides for relief by a "suit in equity," notice and "due proceedings had *according to the course of equity*." The system permits appeals to run the indicated course to the Supreme Court of the District of Columbia in all cases except those of interferences. In the latter, if the Commissioner decides against either of the applicants, he may have his remedy by "bill in equity," with "due pro-

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ceedings had," as in the other cases he may proceed by such a bill after said court, on appeal, has passed upon the controversy. So, when interfering patents have been granted, remedy by "suit in equity," under section 4,918, is allowed, "on notice to adverse parties and other due proceedings had according to the course of equity."

It would seem, therefore, that the course of proceeding in either case is clear—viz., "according to the course of equity." Even in the absence of these explicit terms it would be apparent that a suit in equity would have to be governed in its proceedings by equity rules. A manuscript decision by Justice Nelson, in the case of *Atkinson v. Boardman*, has been produced, wherein section 16 of the act of 1836, 5 U. S. Stat. at Large, 123, and section 10 of the act of 1839, 5 U. S. Stat. at Large, 354, were under consideration. So far as the point now before this court is concerned, those sections and the opinion of Justice Nelson are very pertinent and applicable, for sections 4,915 and 4,918 contain substantially the same language, and are in reference to the same subject—indeed, a revision mainly of those sections of the prior acts.

Justice Nelson held: "The question before the Commissioner and Chief Justice contested was a question of fact—namely, which of the parties was the first and original inventor. The same question is now before us, resting upon the proofs which were before the Commissioner, and *also additional testimony taken since the filing of the bill.* * * * The provisions of the acts of Congress, already referred to, allowing the party failing in his application, to file a bill, do not restrict the hearing, in this court, to the testimony used before the Commissioner. Either party, therefore, is at liberty to introduce additional evidence, or rather, to speak more accurately, the hearing is altogether independent of that before the Commissioner, and takes place on such testimony as the parties may see fit to produce agreeably to the rules and practice of a court of equity. The evidence before the Commissioner is not evidence here, except by consent of parties. It is taken, generally, without much regard to formality, and is *ex parte*, and, even if permitted to be used here, not entitled to the credit of proof taken in the usual way."

In *ex parte* Greeley, 6 Fish., 575, a decree for a patent was sought after an appeal had to the Supreme Court of the District of Columbia. The bill was filed under section 52 of the act of July 8th, 1870, being the same as section 4,915 of the Revised Statutes, and the United States Circuit Court, in stating the case and referring to the foregoing section 52, incidentally remarked that "it is virtually an appeal from the decree of the Supreme Court of the District of Columbia rejecting the application for a patent." So far as ascertainable from the reported case, only the records of the Patent Office, the proceedings in the Supreme Court of the District of Columbia, and the affidavit of the complainant in support of his bill, were before said Circuit Court.

Section 43 of the act of July 8th, 1870, now section 4,905 of the Revised Statutes, authorizes the Commissioner of Patents to "establish rules for the taking of affidavits and depositions required in cases pending in the Patent Office; and such affidavits and depositions may be taken before any officer authorized by law to take depositions to be used in the courts of the United States, or of the State where the officer resides." The sections following provide the modes of enforcing the attendance of witnesses.

Hence, all the proceedings had before the Patent Office should be received, together with such other testimony as may be taken in the progress of this suit. When the United States Circuit Court for the District of Massachusetts spoke of the case before it as "virtually an appeal," it did not determine that no new testimony was allowable, nor that the cause was to be governed solely by rules pertaining to an appeal.

In stating that the case was "virtually an appeal," no more was meant than that the object of the bill was to secure a different result from that which the Patent Office and the Supreme Court of the District of Columbia had allowed. In that sense alone was there a virtual appeal.

The case before Justice Nelson was, in the then condition of the statutes, for an allowance of a patent which had been refused; the sections of the then existing statute being what, under subsequent legislation, have become sections 4,915 and

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4,918 of the Revised Statutes. This is a case, however, as was that before Justice Nelson, for a patent which had been refused. The refusal here was on the ground of interference. Irrespective of the ground of refusal, and irrespective of the fact that an appeal may or may not lie to the Supreme Court of the District of Columbia, and, also, irrespective of the fact that interfering patents may have been issued, the complaining party may have his remedy in equity under section 4,915 or 4,918, as the case may be, and the proceedings will be of the same character. The court will receive all the proceedings had before the Patent Office, and when an appeal lies to the Supreme Court of the District of Columbia, all the proceedings had before that court, *together with all new and additional testimony* taken in the equity proceedings. If this be not so, then no force is given to the legislative will which permits suits in equity after decision by the Patent Office and the said appellate court. A United States Circuit Court proceeds not as an appellate tribunal, but as a court of original jurisdiction.

The motion is granted.

S. S. Boyd, for the motion.

West & Bond, contra.

THE THATCHER HEATING COMPANY

vs.

WILLIAM H. DRUMMOND ET AL. IN EQUITY.

Where complainants proved admissions of the defendants, (1) that they had sold a number of a certain article, and (2) that said article was substantially the same as the article described in the three claims of the complainant's patent, and no testimony was offered by the defendants, *held*, that the infringement was sufficiently proved.

(Before NIXON, J., District of New Jersey, October, 1877)

Ketchum Harvesting Machine Co. v. Johnston Harvester Co.

NIXON, J.

This suit is brought for the alleged infringement of letters patent No. 104,376, dated June 14th, 1870, granted to John M. Thatcher for "improvement in fire-place heaters."

The answer of the defendants denies that the said Thatcher was the original and first inventor of the improvement described in said letters patent; and claims that the substantial matters and things set forth therein, were described in various patents and printed publications, specifically enumerated in said answer, and were in public use long anterior to the date of the said letters patent.

The complainant proved its incorporation; the issuing of letters patent to John M. Thatcher; various mesne assignments to the corporation; and the admissions of the defendants, that they had sold a number of the "Burtis Heaters;" and that the "Burtis" heater was substantially the same as the heater described in the three claims of the complainant's patent, and then rested its case.

No testimony has been offered by the defendants.

The letters patent owned by the complainant are *prima facie* good, and the infringement is proved.

There must be a decree for the complainant, an injunction, and a reference for an account.

F. C. Bowman, for the complainant.

A. J. Todd, for the defendant.

THE KETCHUM HARVESTING MACHINE COMPANY

vs.

THE JOHNSTON HARVESTER COMPANY. IN EQUITY.

The reissued patents, viz: one dated July 25, 1871, Number 4,484, granted to W. F. Ketchum, for "improvement in single-wheel grain and grass cutting machines," and two dated December 12, 1871, numbered respectively 4,672 and 4,673, granted to W. F. Ketchum for "improvements in attachments for harvesters," *held*, to be valid.

(Before WHEELER, J., Northern District of New York, November, 1877.)

Ketchum Harvesting Machine Co. v. Johnston Harvester Co.

WHEELER, J.

This cause has been heard on bill, answer, replication, proofs, briefs, and oral argument of counsel for the orator, and oral argument of counsel for the defendant.

The orator has one reissued patent, No. 4,484, dated July 25th, 1871, in force to the 29th day of June, 1879, and has had two others, No. 4,673, in Divisions A and B, dated December 12th, 1871, which expired February 10th, 1873, for improvements in grain and grass cutting machines, originally granted to William F. Ketchum, the two latter as one, and all transferred to the orator, as described and set forth in the pleadings and proofs.

The one not expired seems to be, substantially, for an improvement in single-wheel machines, by which the main frame and operating machinery are carried largely into and somewhat through, and the draft-pole close up to, a hollow driving-wheel having outward-curved spokes and outward hub, so as to balance the weight of the machine well on the wheel and the draft of it on the pole. One of the others, for a shoe slotted as a guide for and guard to the cutter at the heel of the cutter-bar, and extending forward from there to the main parts of the machine, to support the cutter-bar on the ground, and clear a track for and shield the heel of it there, in grass-cutting machines, and to support it from the main parts, in either grass or grain cutting machines. And the remaining one, for braces from the cutter-bar to extensions of the main frame above and in front or rear of it to support it from these extensions and leave a clear space toward the main frame for the operating machinery. These inventions, especially the one for balancing the machine, and the one for the shoe, serving also for a brace, are useful and valuable.

The orator claims that the defendant has infringed, to some extent, all of them; and on the part of the defendant it is insisted that Ketchum was not the first inventor of these improvements; that the reissues of the patents to the orator were not for the same inventions as the original patents, and that, therefore, they were void, and that, if they are valid, the defendant has not infringed them. It is obvious that the ques-

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tions arising on these claims are almost, if not quite, pure questions of fact.

The defendant has introduced several prior patents to others for improvements in this class of machines, claiming that they show earlier inventions of these improvements; and the original patents to Ketchum, claiming that they set forth different inventions. But from as careful as practicable an examination of these patents, and comparison of them with those of the orator, in the light of the other evidence in the case, none of the inventions by others than Ketchum seem to have been directed toward the same objects sought for by him in these, and none of them appear to have in any substantial degree attained the same results that he did; and neither does it appear that the reissues are, in reality, for any inventions different from the ones described in the original patents. Therefore, the patents are considered valid.

It does appear from the testimony and exhibits concerning the defendant's machines that the defendant has manufactured and sold machines for cutting grass, and combined machines for cutting grass and grain, containing a form of shoe extending forward from the heel of the cutter-bar to the main parts of the machine, that is covered by the orator's patent for improvements in those respects, during the time the orator had those patents, and has been, and is now, manufacturing and selling machines for cutting grain that embody a part of the combination covered by the orator's patent for placing the machinery mostly within, and the draft-pole near to, the single hollow drive-wheel.

Therefore, it appears that the orator is entitled to a decree for a reference to a master for an account of the profits to the defendant gained by these infringements, and of the damages thereby to the orator, and for the payment of the profits, or damages if in excess of the profits, to the orator, and for an injunction against further infringement, according to the prayer of the bill, with costs to the orator.

Let a decree be entered for the orator accordingly.

H. U. Soper and *A. McCallum*, for the complainant.

George Harding, for the defendant.

Pentlarge v. Beeston.

RAFAEL PENTLARGE

vs.

WILLIAM R. BEESTON ET AL. IN EQUITY.*

P. obtained a patent, as inventor, in March, 1874, for an "improvement in bungs for casks." In June, 1876, B. applied for a patent, as inventor, for the same invention. An interference was declared, and proofs were taken. The examiner decided in favor of P. On appeal, the board of Examiners decided in favor of B. On further appeal, the Commissioner of Patents decided in favor of P. After the issue of the patent to P., B. and F. were in partnership with P., and the firm made the bungs and advertised them as secured by patent. After the dissolution of such partnership, B. and F. continued to make the bungs: *Held*, that P. was entitled to a preliminary injunction to restrain B. and F. from so doing.

The proceedings before the Patent Office, between the same parties, cast on the defendants the burden of showing the determination of the Commissioner to have been manifestly wrong.

(Before BENEDICT, J., Eastern District of New York, November, 1877.)

BENEDICT, J.

This action is brought to recover damages for the infringement of a patent for an improvement in bungs for casks, issued to the plaintiff March 17th, 1874, and reissued on June 30th, 1874, and to obtain an injunction. The case is now before the court upon a motion for a preliminary injunction, to restrain the defendants from manufacturing a certain form of bung during the pendency of the action. The issue between the parties presents a question of fact, the decision of which must depend largely upon the credibility of the witnesses. There is no dispute as to the novelty and usefulness of the invention described in the plaintiff's patent, but it is denied that the plaintiff was the inventor. An issue of this character is common enough, but, in this case, it presents some peculiar features. It is conceded, on all sides, that the

* 14 Blatchf. C. C. R., 352.

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invention in question originated in the factory of Beeston, Pentlarge & Co., a firm engaged in manufacturing bungs; that it was first conceived in the month of February, 1874; and that the circumstance which led to the conception was a visit to the firm of one George W. Gillette. The firm of Beeston, Pentlarge & Co. was, at that time, composed of Rafael Pentlarge, the plaintiff, and William R. Beeston and Frederick Pentlarge, the defendants; and the question in the case is, which of the parties invented this bung. No one claims that there was a joint invention, but Rafael Pentlarge, the plaintiff, and William R. Beeston each claims to have been the sole inventor. This question has before been raised between these same parties, in an interference case before the Patent Office. The original patent having been issued in March, 1874, on June 13th, 1876, the defendant Beeston applied to the Patent Office for a patent for the same invention, then for the first time making any public claim to be the inventor. A case of interference was then declared, and, in that case, testimony was taken at considerable length, and by both parties. The case was stoutly contested, and it was three times argued. In the first instance, the decision of the examiner was adverse to the claim of Beeston. An appeal was taken to the board of Examiners, and the decision of the board was to issue a patent to Beeston, in order, as the board say, that Beeston should be put on an equal footing with Pentlarge before the courts. From this determination of the board of Examiners an appeal was taken to the Commissioner of Patents, who reversed the decision of the board of Examiners, and refused to issue a patent to Beeston. In these several hearings the question at issue was the precise question argued upon this motion, and upon the determination of which, at final hearing, the validity of this patent depends. The evidence adduced in support of and in opposition to this motion consists of the evidence taken in the interference case, the parties having seen fit to make that a part of the record, together with certain additional affidavits; and the argument addressed to me has gone over the whole ground of controversy. I do not, however, feel called on, upon this motion, to make a determination of the decisive

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question of the case. That should be left to be decided upon the hearing of the cause. Without, therefore, determining whether this bung was invented by Pentlarge or by Beeston, I am of the opinion that the motion of Pentlarge for an injunction should be granted, and for the following reasons : Pentlarge has a patent duly issued to him in 1874. Beeston has no patent. A strenuous controversy, wherein the parties, and their witnesses, were fully examined, with opportunity for cross-examination, has been had before the Patent Office, and the defendant Beeston then failed to convince the Commissioner that he was the inventor of this bung ; and, while it is true that the hearing and decision in an interference case is not equivalent to a judicial determination (*Union Paper-Bag Machine Co. v. Crane*, 1 Holmes, 429), it seems proper to consider, upon a motion like the present, proceedings such as were had before the Patent Office between the same parties, as having the effect to cast upon the defendants the burden of showing the determination to have been manifestly wrong.

Moreover, it appears in evidence, that, after the patent was issued to the plaintiff, and up to the time when the partnership relation between Beeston and the plaintiff was dissolved, the firm of Beeston, Pentlarge & Co. were making and selling these bungs, and were advertising them to the public as secured by patent. This was a representation by the defendants that the bungs were protected by the plaintiff's patent, that being the only patent ever issued for this invention ; and, during this period, there was an acquiescence by the public in the claim thus made. Nor does it now appear that any persons besides the defendants, one of whom is the son, and both the former partners, of the plaintiff, claim the right to use this invention. Furthermore, since the dissolution of the partnership, and up to this time, the defendants, although well aware that the only patent in existence is that of the plaintiff, are making and selling these bungs as patented articles, and, by their advertisements, now represent to the public that the bungs they are making are secured by a patent.

These acts and declarations of the defendants are adverse to the ground they take in the defence of this action, and, coupled with the proceedings before the Patent Office, appear

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to me to constitute a valid ground for asking the interposition of this court, by way of injunction, to compel the defendants to abstain from the manufacture of this bung until the validity of Beeston's claim shall have been passed on at the final hearing. The application for an injunction is, therefore, granted.

Preston Stevenson, for the complainant.

Abbett & Fuller, for the defendants.

JOHN C. KLEIN

vs.

KLOMAN PARK ET AL. IN EQUITY.

The patentee's invention consisted in supplying dies of novel construction and form, and so adapted to forming the eyes of picks by a new method, and in combining with the old steps, in forming the eyes of picks, a new element, viz.: the drawing them down on a mandrel between rolling dies which completely encompass the walls of the eye, this process resulting in the elongation of the walls of the eye as may be desired, with uniform thickness, and the complete formation of the eye by the process of rolling alone, leaving only finishing to be performed: *Held*, that this last step in the process of manufacture is new, and impresses upon the whole method the character of novelty.

The differences between the defendants' dies and those of the complainant are merely formal, defendants having substituted two dies at the sides, which are the equivalents of the side walls of the complainant's dies.

Reissued letters patent No. 6,951, granted to J. C. Klein, February 29th, 1876, held valid.

(Before McKENNAN, J., Western District of Pennsylvania, November, 1877.)

This was a suit for the infringement of reissued letters patent, No. 6,951, granted to complainant February 29th, 1876. The claims were for "(1.) The within-described method of forming the eye of picks, consisting in first punching the bar; second, in setting down the metal on either end around

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the eye ; and, lastly, drawing down on a mandrel between rolling-dies, substantially as described and shown. (2.) The dies E, constructed as described, for drawing down the eye, substantially as shown."

McKENNAN, J.

The complainant's patent contains two claims, both of which the defendants are alleged to have infringed. The first is for the method described in the specification of forming the eye of picks, consisting in, first, punching the bar ; second, in setting down the metal on either end around the eye ; and, lastly, drawing down on a mandrel between the rolling-dies, substantially as described and shown.

The second is for the dies by which this method is in part effectuated, constructed as described, for drawing down the eye, substantially as shown.

The original and distinguishing merit of the patentee's invention consists in supplying dies of novel construction and form, and so adapted to forming the eyes of picks by a new method, and in combining with the old steps in forming the eyes of picks a new element—to wit, drawing them down on a mandrel between rolling-dies, which completely encompass the walls of the eye. The result is the elongation of the walls of the eye as may be desired, with uniform thickness, and the complete formation of the eye by the process of rolling alone, leaving only such further manipulation as may be necessary to give finish to the device.

Under the proofs in this case, this last step in the process of manufacture is new, and, therefore, impresses upon the whole method the character of novelty.

The only process set up to controvert this was practised upon what is called the "Root" machine at the Collins Company's works in Collinsville, Connecticut, before the date of complainant's patent. But it is evident that that machine did not perform the complete operation indicated in the first claim of the patent here, nor was it capable of performing it. The walls of the eye were undoubtedly drawn out upon a mandrel by the dies used in it ; but they did not encompass or envelop the walls, nor, when their function was exhausted, did they form an eye whose walls were of uniform

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thickness. The eye was left thicker at the ends than at the sides, and it was, therefore, necessary to reduce this inequality by an additional and independent method. This is apparent, not only from the construction of the dies themselves, and the device produced by them, but from the proofs as to the manner of their use and the result of their operation.

Nothing, then, appears in the case to warrant any doubt as to the complainant's title. Upon the question of infringement, I think it is clear that the complainant's method of manufacture is employed by the defendants. After punching the iron bar out of which the pick is to be formed, they set down the metal on either side of the eye, and then draw down the eye on a mandrel, between rolling-dies which entirely envelop the walls of the eye, and thus, by one operation, completely form it with the desired elongation, and with walls of uniform thickness.

It is true that the dies used by the defendants are formally different from those described in the complainant's patent ; but I am satisfied that they embody all the characteristic features of the complainant's dies. Instead of two dies adapted to effectuate the complainant's method, placed above and below each other, the defendants use dies composed of four parts—top and bottom dies and side dies. The side dies, however, are the obvious equivalents of the side walls of the complainant's dies. They operate in the same way, perform the same function, and produce the same result. The only difference is in the method of their attachment to the upper and lower dies. In the one case the side walls of the principal dies are immediately attached to them ; in the other they consist of dies separable from the main ones, but secured in their places by pivots, and when thus in place co-operating with the principal dies precisely as do the side walls of the complainant's top and bottom dies.

I am, therefore, of opinion that the complainant's patent is valid, that both its claims have been infringed, and that a decree should be rendered for the complainant.

George H. Christy and J. J. Coombs, for the complainant.

Bakewell & Kerr, for the defendants.

Reissner v. Anness.

CHRISTOPH REISSNER ET AL.

vs.

S. W. ANNESS ET AL. IN EQUITY.

The defendants, in answer to a bill for infringement, filed a plea containing three distinct points of defence. The matters pleaded all related to the invalidity of the complainants' patent, but alleged separate and distinct grounds for such invalidity: *Held*, that where more than one point of defence is relied on, such points should be stated by way of answer and not of plea, the latter being in such case, bad for duplicity.

A plea may contain an averment of several facts, but they must all conduce to a single point of defence. The practice is, not to confine the defendant to his first ground of defence by striking out the others, but to allow him either to set down the pleas as an answer, or to put him to his election as to which of the pleas he will abide by.

(Before NIXON, J., District of New Jersey, November, 1877.)

NIXON, J.

The bill of complaint is filed against the defendants for infringement of certain letters patent, No. 7,751, reissued to John A. Fray, June 19th, 1877, for improvements in coal-oil stoves, to which the defendants have put in a plea embracing three distinct defences, and which are, in effect, three several pleas, substantially as follows:

(1.) That the reissue to Fray was unlawful, because he had previously obtained a patent in Canada for the same invention, granted May 15th, 1873, for the term of five years, and the reissue here was not limited to expire at the same time with the foreign patent.

(2.) That new matter was introduced into the reissue which was not shown and described in the original patent.

(3.) That, for the purpose of deceiving the public, the description in the reissued letters patent was made to contain less than the whole truth relative to the alleged invention.

The plea or pleas were set down for argument, and the

first question raised was whether the same were not bad for duplicity.

The counsel for the defendants insists that they are not, because, although three distinct matters are alleged against the right of the complainants to recover, they all relate to a single defence—to wit, the invalidity of the complainants' patent.

The office of a plea, in equity practice, is to present to the court a *single point* of defence. The rule is not a harsh one for the defendant, because, when he desires to avail himself of more than one matter of defence, he can resort to an answer, which affords him ample opportunity ; whereas in common law proceedings, double pleas are allowed, for the reason that the defendant has no other mode of presenting his various defences to the court.

The use of a plea, and the reasons for its allowance, are, that it saves time, trouble and expense ; but if parties are permitted to multiply pleas, setting up different facts in avoidance of the plaintiffs' claim, nothing is gained in these respects, and an answer is the proper course of pleading.

The general rule is, that a plea must not contain more defences than one. It is not limited to one fact. It may embrace various facts ; but they must all conduce to a single point on which the defendant rests his defence. Sto. Eq. Pl., section 654.

The counsel for the defendants claim that he has only one plea, and that he has the right to allege therein three grounds of invalidity of the complainant's patent.

The trouble about this view of the case is, that each one is an independent defence, having no relation to the other, and that although included in one plea, their allowance involves all the consequences of three separate and distinct pleas. If they may set up three, then why not one hundred, upon each of which, if the complainants put in replications, there will be an issue joined, and we shall be in the midst of the complications and difficulties which a single plea was designed to prevent.

The counsel for the complainants on the argument assumed that the defendants were obliged to stand upon the first ground of defence alleged, and that the two remaining

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grounds should be stricken out. But I think the true rule of practice in such cases was indicated by Ch. Kent in *Saltus v. Tobias*, 7 Johns., ch. 214, where he allowed the defendant to elect which plea he would abide by.

The proper order in the case is, that the pleas as filed may be set down as an answer at the option of the defendants ; and, if they do not choose to do this, that ten days be given to them to elect which of the several grounds of defence they will stand on, and when such election is made, that the other grounds be overruled.

And it is ordered accordingly.

B. F. Lee, for the complainants.

A. V. Briesen, for the defendants.

ROBERT C. PHILLIPS ET AL.

vs.

THE CITY OF DETROIT. IN EQUITY.

An injunction against a corporation is binding upon all persons acting for or on behalf of it who have notice of the writ and of its contents, whether they be actually served with it or not.

The members of the Board of Public Works of the City of Detroit are bound by an injunction against the city.

It is no excuse for the violation of a preliminary injunction in a patent case, that the patent is invalid or the writ improvidently granted. If the court has jurisdiction to issue the writ, it must be obeyed until it is dissolved.

The wooden pavement patented to Robert C. Phillips is infringed by the use of blocks cut from trees or saplings in their natural form, though a narrow segment is cut off from one side of each block.

Where a preliminary injunction in a patent case is violated, the defendants will not be required to pay the patentee the amount of his royalty, where they were acting in an official capacity, deriving no personal benefit from the infringement, and especially if there be reason to believe they acted in good faith.

(Before BROWN, J., Eastern District of Michigan, November, 1877.)

BROWN, J.

The defence that the members of the Board of Public Works were not parties to this bill, and were not served with the writ, was disposed of adversely to them upon the preliminary argument of this motion. We then held, and such we understand to be the law, that an injunction against a corporation is binding upon all persons acting for or in behalf of the corporation who have notice of the writ and of its contents, whether they be actually served with it or not. In *Wellesley v. the Earl of Mornington*, 11 Beav., 180, 181, an injunction was issued against the defendant, but it did not extend in terms to "his servants and agents." A motion having been made to commit his agent for a breach of the injunction, it was held irregular; but it was afterward decided that if he had knowledge of the writ he might be committed for the contempt, although not for the breach of the injunction. See also, *The People v. Sturtevant*, 9 N. Y., 263, 267; *The Bank Commissioners v. The City Bank of Buffalo*, 1 Barb. Ch. Practice, 636; High on Injunctions, 1st Ed., Secs. 862, 863, 853, 854; *Safford v. The People*, 5 Cent Law Jour., 384.

As the respondents in the first allegation of their affidavit admit they had notice of the injunction, I think they are bound to obedience of the writ, and it only remains to determine whether they have been guilty of a violation. The authorities are full and conclusive to the point, and, indeed, it was admitted upon the argument that respondents were not entitled to claim in defence that the patent was invalid or the writ improvidently granted. *The People v. Sturtevant*, 9 N. Y., 263; *Sullivan v. Judah*, 4 Paige, 444; *Russell v. Railway Co.*, 1 Eng. L. & E. Rep. 101; High on Inj., 1st Ed., Sec. 873. The patent had been upheld by the decisions of at least two courts before the commencement of this suit, a fact which is, in ordinary cases, sufficient to authorize a preliminary injunction. If, in the mean time, respondents had become satisfied that it was invalid, the proper procedure was to make a showing of this fact and apply for a dissolution. If the court had jurisdiction to issue the writ, it should be obeyed until it is dissolved. I should feel no hesitation, however, in passing upon the validity of this patent, so far as any defences

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may exist which were not brought to the attention of the circuit judge upon the original hearing.

Had respondents simply carried out the contracts made by them for paving the streets in question, I should have felt little difficulty in holding them innocent of any violation of this writ. The claim of the complainants' patent is in the following words: What I do claim as my invention, and desire to secure by letters patent, is: "A wooden pavement composed of blocks of any desired wood, cut from the trunks or branches of trees or saplings, of any desired length, in their natural form, the bark only being removed, placed with their fibres vertical, upon a bed of broken stone and gravel or sand, or either of them, the spaces between the blocks being filled with gravel or sand, the whole made compact by ramming, rolling, or other proper method, as herein shown and described."

In his specification he says distinctly that he does not claim, broadly, the use of wooden blocks in the state in which they are cut from the tree or branches, nor the foundation of stone or gravel, nor the filling of the spaces between the blocks with sand or gravel, separately considered. In other words, he claims a combination, but not the separate elements of the combination.

A party may lawfully use wooden blocks in their natural form, or the foundation or filling of stone or gravel, but he cannot use them both without being guilty of an infringement. The specifications of the contracts made by respondent called for the use of "blocks, stripped of bark, of irregular or octagon shape, sawed from cedar timber," a material departure from the wooden blocks cut "in their natural form," as specified in complainant's claim. This was evidently the theory of the city counselor, who, in his affidavit, states that after the service of the injunction he advised the Board of Public Works "that no more pavement which they had been laying, known as the round cedar-block pavement, could be laid while said injunction remained in force; that thereupon it was proposed to split and divide the round cedar blocks, and make them into irregular shapes, and not use the block in its natural form;" and that he advised the board that

such use would not be an infringement of the complainants' patent ; and the printed forms of contract which had been previously used, and which provided for blocks of a "round cylindrical shape," were changed so as to require the use of blocks of irregular and octagon shape.

The difficulty is, that while his advice was followed in making the contracts, it was disregarded in laying the pavements. The actual block laid was cut from the trunks and branches of trees or saplings in their natural form, precisely as is claimed in complainants' patent, except that a segment of from half an inch to one and a half inches in thickness was split from one side of each block. I regard this as plainly a subterfuge. The slicing off of this strip did not materially change the forms of the blocks, and was of no possible utility in laying the pavement. It was, perhaps, intended to be a compliance with the advice of the city counselor that the blocks must be split and used in an irregular shape in order to avoid the patent. But nothing is better settled in the law of patents than that identity is not affected by colorable differences, that regard is had to substance and not form, the inquiry being whether the infringing machine is the same in principle as that patented. *Curtis on Patents*, 309 ; *Seymour v. Osborne*, 11 Wall , 516.

I do not think the affidavit of the respondents exonerates them from a participation in this infringement. They swear that the inspectors were instructed by them that the blocks must not be used nor laid in their natural form ; that such blocks must be split and their form made irregular, and that no round block in its natural form must be accepted, and that the patent of complainants must not be infringed ; that whenever they discovered blocks in their natural form being used they ordered them taken up ; and that if any pavement was laid in violation of the injunction it was so laid contrary to their directions.

It is, however, the duty of the Board of Public Works to supervise the grading and paving of all streets. Session laws of 1873, vol. 3, 178, sec. 8. In their affidavit they admit they reported to the Common Council that the contracts had been performed and the work accepted, but claim they did so

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upon the report of the inspectors having charge of the work, that the same was done according to the several contracts therefor, and that if the contractors laid the pavement in such manner as to violate the injunction, it was done without their knowledge; and that the acceptance of such pavement was not a violation on their part of the injunction, when the same was laid without their knowledge and consent. But their affidavit is not inconsistent with a knowledge upon their part that the only alteration of the wooden blocks consisted in splitting off the strip, as above specified. This was a nominal compliance with their instruction not to use the block in its natural form, but to split it, and possibly they may have considered that this was sufficient to avoid an infringement; but if they accepted anything less than the literal performance of the contract, requiring the blocks to be cut in an irregular or octagon shape, they did so at the peril of violating this injunction.

In view of their duties, in connection with the paving of the public streets, to supervise the work and to report the completion of the contract to the council, and also in view of the fact that in the performance of these duties they could scarcely have been ignorant of the manner in which these pavements were being laid, I must hold them chargeable with knowledge of and participation in the violation of this injunction committed in the use of this evasive block. To render them liable it is not necessary they should have actually committed the breach in person; but if they were present, aiding and abetting the commission of the act, prompted it to be done by other persons, or, having charge of a public work like this, permitted their contractors to depart from the letter of the contract, and accepted the report of the inspectors with approval of work so done, they are liable for an infringement and guilty of disobedience to the writ. High on Injunctions, 1st Ed., sec. 861; *Blood v. Martin*, 21 Geo., 127; *Stimpson v. Putnam*, 41 Vt., 238; *St. John's College v. Carter*, 4 Myl. & Cr., 497. Even if the city counselor had advised the use of this particular block (which he does not seem to have done), or respondents had acted conscientiously and in good faith, it would be no justification, though the court might

consider these facts in fixing the penalty. High on Injunctions, 1st Ed., secs. 849 and 851.

I do not regard the fact that the complainants, Farwell & Robinson, may have been interested in paving certain streets, as estopping them from setting up a violation of the injunction by respondents in paving other streets. They would undoubtedly have a right to take a contract directly for the paving of Woodward Avenue, for instance, without thereby assenting that other parties should pave Jefferson Avenue with their pavement. Indeed, the very object of this, as of all other patents, is to enable the patentee to maintain a monopoly of laying his pavement during the life of the patent. The estoppel would extend no farther than to prevent their claiming an infringement in respect to the particular streets which they were interested in paving. They make no claim for either of these streets.

Complainants' counsel insists with great earnestness that, instead of imposing a fine upon respondents for a violation of this injunction, the court should require them to pay to complainants a sum sufficient to indemnify them for the actual loss or injury that has been produced by the infringement, viz., their usual royalty of sixteen cents per square yard. Without determining whether the court has power to make this order in the absence of a statute to that effect (although the authorities would seem to sustain complainants' view upon this point), it is clearly a matter of discretion. I think the penalty should not be imposed in this case, for the following reasons: 1. While the violation of the injunction was wilful in the eye of the law—*i. e.*, intentional—it was not wilful in any odious acceptance of the term. The respondents were acting in an official capacity in the discharge of a public duty, and derived no personal benefit whatever from the infringement. They may possibly have believed that they were following the advice of the city counselor, and were not, in fact, violating the injunction. 2. The complainants will derive no benefit from the immediate payment of the royalty. The city is amply responsible for any decree they may finally recover, and interest will follow upon the ascertainment of the amount. 3. If this order were made, respondents

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would be obliged to pay sixteen cents per yard royalty upon eighteen thousand three hundred and twenty-nine yards of pavement already laid, and fifteen thousand one hundred and eighty-one yards contracted for but not laid, making thirty-three thousand five hundred and ten yards, at sixteen cents, \$5,361.60. This sum would have to be paid by the respondents personally, with no definite assurance that they would be reimbursed by the city. It seems entirely clear that complainants should not call upon this court to order the payment of this large amount. 4. The patent may in the end be held invalid, in which case the complainants will have received a large amount of money to which they were not justly entitled, and the city be driven to long and doubtful litigation to recover it back. I find no patent case where this course has been pursued for violation of a preliminary injunction.

Respondents, however, being guilty of a violation of this injunction, will be required to pay a fine of fifty dollars each, together with the costs of this motion, and a counsel fee of fifty dollars, and to stand committed till the terms of this order are complied with.

George H. Lothrop, for the complainants.

D. C. Holbrook, for the defendants.

Hamilton v. Rollins.

SUSAN HAMILTON

vs.

JOHN ROLLINS.

SAME

vs.

SHUBAEL D. TODD ET AL.

SAME

vs.

LEVI BUTLER ET AL.

SAME

vs.

GEORGE SHERWOOD. IN EQUITY.

A prior patent which describes and claims mechanism by which a certain result is produced, will not anticipate a subsequent patent for different means by which the same result is attained.

The rule that a cause of action in tort is not assignable, has reference to strictly personal torts, and does not apply to rights of action for damages, and claims growing out of and inhering in property. Such rights will pass by assignment.

A patentee may assign his right to recover damages for infringements of his patent, committed before the assignment.

Letters patent, No. 51,310, granted to Palmer Hamilton, December 5, 1865, for improvement in saw mills, *held* valid.

(Before NELSON, J., District of Minnesota, December, 1877.)

Hamilton v. Rollins.

These suits, heard together, were brought to restrain the infringement of letters patent No. 51,310, granted to Palmer Hamilton, December 5th, 1865, for an improvement in saw-mills, and for an account of profits. The object of the invention was to give to a reciprocating saw a rocking or rolling motion, and it consisted in hanging the saw to cross-heads working in curved guides at the upper end, and straight guides at the lower end, the saw being pivoted to the pitman below the lower cross-head, which gave to the saw the requisite motion. The claim was for "giving to the saw in its downward movement a rocking or rolling motion, by means of the combination of the cross-head working in the curved guides at the upper end of the saw, the lower end of which is attached to a cross-head working in straight guides, and pivoted to the pitman below the saw, with the crank pin, substantially as described."

The complainant claimed under a deed of assignment from the patentee, dated 18th of April, 1873, whereby, after reciting the grant of the letters patent, he "assigned, sold and set over to said Susan Hamilton all the right, title, and interest which I have in said invention, as secured to me by said letters patent, and my whole right and interest in all infringements of said patent, and actions in law for damages for such infringements; the same to be held and enjoyed by the said Susan Hamilton for her own use and behoof, and for the use and behoof of her legal representatives, to the full end of the term for which said letters patent are granted, as fully and entirely as the same would have been held and enjoyed by me had not this assignment been made."

NELSON, J.

These suits are brought by the complainant, an assignee of the patentee, to recover damages for infringements of the patent No. 51,310, granted to Palmer Hamilton, December 5th, 1865, for "improvement in saw-mills."

The defences set up in all the cases are :

1st. Want of novelty.

This patent was sustained in the case of *Ives et al. v. Hamilton*, 92 U. S., 426. It is there described as "an improvement in saw-mills," and "consisted of the combination of the saw with

a pair of curved guides at the upper end of the saw, and a lever, connecting-rod or pitman, straight guides, pivoted cross-head, and slides or blocks and crank-pin, or their equivalents, at the opposite end, * * * 'giving to the saw in its downward movement a rocking or rolling motion, by means of the combination of the cross-head working in the curved guides at the upper end of the saw, the lower end of which is attached to a cross-head, working in straight guides and pivoted to the pitman below the saw, with the crank-pin.' "

The defendants rely upon the Straub patent, No. 7,943, issued in 1851, to sustain this defence. In the case above cited, this patent was not spread on the record, and the Supreme Court did not consider it. I have examined the drawing of the invention and claim of the patentee, and find it is not the combination used in the Hamilton patent. Straub obtains a similar result (a vibratory motion of the saw), but the means devised for producing the motion, and not the result, is the claim made by Hamilton, and for which he was granted a patent. In Straub's patent, the saw is fixed at the upper end between two blocks, and at an angle to the perpendicular of forty-five degrees, or thereabouts, are placed grooved guides in which the blocks with saw attached slide. These guides are fastened to and supported by the saw frame, which consists of two upright standards with a cross-bar at the top running from each to the guides. The opposite end of the saw is fastened directly to a short rod connected to the extremity of a fly-wheel, so that, passing upward and downward by the rotary motion of the wheel, the saw retreats from and advances toward the log, describing in its movement nearly a circle. Between the guides, and running in the same direction, is fitted to the upper end of the saw a rod with spiral spring coiled around it, which strains the saw in descending by opposing its descent, and by its tension draws up the sliding blocks and upper end of the saw, and thus prevents it from bending during its upward and downward movement.

Hamilton obtains a vibratory motion to the saw by the cross-head, to which the saw at the upper end is attached, sliding in curved guides with the concave part toward the log,

Hamilton v. Rollins.

and the opposite end of the saw oscillating slightly by being attached to the pitman rod above the cross-head.

The design of the inventors of both combinations is to secure a motion similar to that given a whip-saw by men in a saw-pit, but the means employed by each are different. The curved guides above and the straight and lever pitman below, all of which comprise the Hamilton mechanical combination, are not found in the Straub patent.

2d. defence. No right of action to recover for infringements occurring before the assignment.

This defence is not intended to apply to all the cases, but, so far as it does, cannot be sustained. Ordinarily, a cause of action in tort is not assignable. This rule, however, has reference to strictly personal torts, but rights of action for damages and claims growing out of and adhering to property, will pass by assignment. The deed of assignment introduced is sufficient to convey the rights vested in the original patentee, and all his interest in infringements, to the complainant. She can, therefore, maintain these suits, and a decree will be entered accordingly for a perpetual injunction and an account, with costs.

Decree accordingly.

W. E. Hale and Geo. H. Lothrop, for the complainant.

Lochren, McNair & Gilfillan and Lamprey & James, for the defendants.

THE ATLANTIC GIANT POWDER COMPANY

vs.

GEORGE A. GOODYEAR.

SAME*vs.*

GEORGE W. TOWNSEND. IN EQUITY.

The reissued letters patent, No. 5,799, for a compound of nitro-glycerine with an absorbent substance, preferably infusorial earth, are infringed by the use of a mealed powder composed of nitrate of soda, charcoal and sulphur.

The rule, that when a substitute is used for one ingredient in a patented combination, which substitute has every property and performs every function of the original in the combination, it does not cease to be an equivalent because in addition it does something more and better, recognized.

The term "inexplosive" in the original patent, was properly omitted in the reissue as being ambiguous and meaning only comparatively inexplosive, or explosive under certain conditions; and such omission, reference being had to the terms of the original specification, did not enlarge the scope of the invention.

The patent having already been contested and held valid in this court on final hearing, this court will not postpone the granting of a preliminary injunction, merely because another suit is pending on the patent in another circuit.

The question of comity between courts of co-ordinate jurisdiction, reviewed.
(Before SHEPLEY, J., District of Massachusetts, December, 1877.)

SHEPLEY, J.

The reissued patent of complainants, No. 5,799, for the invention of Nöbel of a new explosive compound, consisting of a combination of nitro-glycerine with infusorial earth, or other equivalent substance, was fully considered by this court in

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the case of *The Atlantic Giant Powder Company v. Mowbray*.^{*} In that case the reissued patent was fully sustained as valid, and as not claiming in the reissue any invention different from the one substantially set forth and suggested in the original. The question presented in this case is, whether the pulverulent powder compounded of the usual proportions of nitrate of soda, charcoal and sulphur, as used in the "Vulcan blasting-powder," in combination with nitro-glycerine, is, for the purposes of and in that combination, the equivalent of "*the substance*" described in the Nöbel patent, which "possesses a great absorbent capacity, and which, at the same time, is free from any quality which will decompose, destroy, or injure the nitro-glycerine, or its explosiveness," thus, when combined with nitro-glycerine, forming out of the two ingredients "a composition which, without losing the great explosive power of nitro-glycerine, is very much altered as to its explosive and other properties, being far more safe and convenient for transportation, storage, and use than nitro-glycerine." The preferred form of this substance, as described by Nöbel, was the *kieselgurgh*, or infusorial earth. The substance used by defendants, in combination with nitro-glycerine, is a mealed powder of nitrate of soda, charcoal and sulphur, in proportions the same as in some gunpowder in common use in granular form. This substance has in the combination "a great absorbent capacity," and it is "free from any quality which will decompose, destroy, or injure the nitro-glycerine or its explosiveness." The compound of this substance with nitro-glycerine, without losing the great explosive power of nitro-glycerine, is far more safe and convenient for transportation, storage and use than nitro-glycerine. It does not appear to be contended that the substance itself used by defendants does not possess, in the combination, every property claimed for the infusorial earth in the dynamite patent, or that the combination of it with nitro-glycerine, as "Vulcan blasting-powder," does not possess every attribute and property, in a greater or less degree, possessed by dynamite.

The contention of defendants is, that the only object and

^{*} Reported in 2 Bann. & Ard., 442.

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aim of Nöbel's invention, as patented, was to render nitro-glycerine safer in handling and transportation ; that there was no intent to augment its explosive force ; that, on the contrary, the solid substance exerted no influence and remained as inert matter, while the object of the manufacturer of the Vulcan powder is stated to be " to render the explosion and combustion of gunpowder instantaneous." That this is not the sole or principal object of the combination is perfectly evident. If the only object of the combination be " to render the explosion and combustion of gunpowder instantaneous," why begin the process by substituting for the granular gunpowder, so highly explosive, a mealed powder of the same ingredients in a pulverulent state, and of a lower degree of explosiveness than grained powder ? As nitro-glycerine has eight or ten times the explosive force of the same quantity of gunpowder, as it explodes under proper conditions much more rapidly and instantaneously than gunpowder, the object of the compound is, manifestly, not merely to get an instantaneous explosion and combustion of the gunpowder, but *primarily* to effect an explosion, the operative effect of which is principally due to the nitro-glycerine in the compound, although augmented in some degree by the gas generated by the explosion of the powder. If the purpose be merely, by means of the nitro-glycerine, to effect instantaneous combustion of the powder, why is the ingredient of sulphur introduced, whose only function is to facilitate ignition—a purpose better accomplished by the nitro-glycerine itself ? The real question in the case is more truly stated as follows : Does the substitution of gunpowder, as used in the Vulcan powder in combination with nitro-glycerine, in the place of the infusorial earth or other absorbent described by Nöbel, make the combination a different and not an equivalent compound, because when gunpowder is used as an absorbent, in addition to fulfilling every condition and performing every function of the absorbent in the dynamite compound up to the time of the explosion, and at that time, it *then* has the additional function of co-operating, by means of its conversion into gas, with the nitro-glycerine in rending the rock, instead of remaining, like the infusorial earth, an inert substance ?

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The mica powder of Mowbray was held to be an equivalent of the dynamite, and to be subordinate to the dynamite patent, although the mica scales of Mowbray, while possessing all the properties which render the infusorial earth efficient and useful in the compound, had additional properties of greater elasticity and resiliency, and although the nitro-glycerine used by him and prepared by his process was much more effective than the less highly nitrated nitro-glycerine known to Nöbel at the date of his invention. The books are full of cases proving that when a substitute is used for one ingredient in a patented combination which has every property and performs every function of the original in the combination, it does not cease to be an equivalent because in addition it does something more and better.

The equities in Mowbray's case were much stronger than in this case. For Mowbray, although not the first and original, but a subsequent inventor, was in fact an independent inventor of the substance of the Nöbel invention, and he also made a subsidiary invention, an improvement on the dynamite invention. In the present case there is no evidence of a combination of nitro-glycerine with gunpowder *as an absorbent* before the invention of Nöbel, or even before it was used by the owners of the Nöbel patent, as one of the modes of using and embodying his invention. The defendants rely upon the position assumed by them that, as gunpowder is an explosive of itself, the use of it in the combination is open to them, as the assignees of Nöbel are claimed by them to be limited by the terms of their patent to a non-explosive substance as the absorbent. At the hearing on this motion the argument was strenuously and forcibly presented to the court that Nöbel described his absorbent as an "inexplosive" substance, and that if the omission of the term "inexplosive" in the reissue enlarges the scope of the invention, the reissue itself is void; and that if the reissue is to be construed in connection with the original, and for the same invention, it must be limited to the use of absorbents as equivalents which are inexplosive. This position of the defendants is entitled to careful consideration.

In *Russell v. Dodge*, 93 U. S. Reports, 460, in delivering the

opinion of the Supreme Court of the United States, Mr. Justice Field says: "The change made in the old specification, by eliminating the necessity of using the fat liquor in a heated condition, and making in the new specification its use in that condition a mere matter of convenience, and the insertion of an independent claim for the use of fat liquor in the treatment of leather generally, operated to enlarge the character and scope of the invention. The evident object of the patentee in seeking a reissue was not to correct any defects in specification or claim, but to change both, and thus obtain, in fact, a patent for a different invention. This result the law, as we have seen, does not permit." See also *Seymour v. Osborne*, 11 Wall., 544. The reissue in this case is not invalid according to the principles of law as stated in *Russell v. Dodge* and *Seymour v. Osborne*. The word "inexplosive" is applied in the original patent as a term of description to a substance only preferentially used. The other descriptions in the specification clearly apply to substances which in one sense may be explosive, but are inexplosive as compared with nitro-glycerine. The word "inexplosive" appears clearly to have been used in the original patent to describe substances which, as compared with nitro-glycerine, were inexplosive by concussion, which would not, of themselves, explode under those conditions which rendered nitro-glycerine so dangerous and unsafe for practical use, and which, inexplosive of themselves under those conditions, when combined with nitro-glycerine, would make the combination a compound which would also be inexplosive except under such conditions as were not inconsistent with substantial safety in its use for blasting and similar purposes. In this sense the meal powder used by the defendants is inexplosive. It prevents, by the interposition of its particles, the explosion of the nitro-glycerine by any such concussion as would ordinarily explode it when uncombined with an absorbent. It makes the compound practically inexplosive under ordinary fortuitous and accidental concussions, and practically explosive only under predetermined and prearranged conditions. The word is omitted in the reissue, and we think properly omitted, not for the purpose of including equivalents which were not

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within the scope of the original invention as described, but as an ambiguous expression not consistent with the other words in the specification which clearly describe the absorbent, its properties and functions, all of which properties and functions, it is evident, from a reading of the original patent, might appertain to a substance explosive under some conditions, but inexplusive under those conditions which made nitro-glycerine explosive by concussion, and dangerous and unsafe for practical use.

The conclusion, therefore, I think is a legitimate one, that under the reissued patent the owners of the patent are not limited to treat as infringements the use of such equivalents only as are actually inexplusive, but they are entitled to the exclusive use of such equivalents as are inexplusive as compared with nitro-glycerine, and which, while complying with the other requisites of the infusorial earth in the combination, will, also, when combined with nitro-glycerine, form out of the two ingredients a composition which, without losing the great explosive power of nitro-glycerine, is more safe and convenient for transportation, storage and use than nitro-glycerine.

The objection is taken by the counsel for the defendants to the granting of a preliminary injunction by this court in the cases now before the court, for the reason that an action has been pending for two years and upward in the circuit court for the second circuit, in which the same questions are involved, and that no effort has been made to prosecute such action, or to obtain a preliminary injunction. It is proved that this action is pending in the circuit court for the second circuit. It is urged that the courtesy usually observed by one court toward another court of equal jurisdiction should deter this court from the exercise of its power to grant a preliminary injunction till that case, which was first originated in the other tribunal, should be finally brought to trial and decided by the court.

A consideration of the condition of this litigation in the respective courts will show that there is no foundation for this objection, and no ground for contending that the exercise of the jurisdiction of this court over the subject-matter

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would involve any want of courtesy to the court in which the other action is pending. It is to be observed, in the first place, that the Nöbel patent, under which this litigation arises, has been made the subject of litigation in this circuit, and that the Nöbel patent, after a long and patient and exhaustive examination and argument by able counsel, and a hearing of the testimony of the most competent experts, has been adjudicated to be valid. The foundation, therefore, has been laid in this circuit for a motion for a preliminary injunction. The patent itself having been sustained after a litigation closely contested and free from any pretence of collusion or of any neglect to properly raise and ably present any issues which could be raised in defence, there is good ground upon which the party complainant can urge with more force its motion for the preliminary injunction in this circuit, in which the validity of the patent itself has been sustained, in which the principal questions arising in this case, as well as in others in relation to the validity of the reissue, have been fully tried and determined.

If such had not been the case in this circuit, and if there were a case pending in another circuit court of the United States involving the validity of this patent which had not been adjudicated upon in this circuit, and that case had progressed to a final hearing and was before the court for adjudication in such other circuit, this court, in the exercise of proper courtesy toward other tribunals of concurrent jurisdiction, would probably decline to hear a motion for a preliminary injunction, and would certainly decline to adjudicate upon it, under ordinary circumstances, without awaiting the decision of such other circuit court before which the case was pending for adjudication after a final hearing.

It would seem to follow that in this court, in which there has been such adjudication after a final hearing and a determination upon the validity of the patent, was the place, and peculiarly the proper place, to make the motion for a preliminary injunction, and that the exercise of its jurisdiction involves clearly no want of courtesy to any other tribunal in which such case has not reached a final hearing, and in which the testimony does not appear to have been taken. The

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injunctions, therefore, in these cases must issue against the defendants in the usual form.

Browne, Holmes & Browne, for the complainants.

Godfrey Morse, for the defendants.

THE AMERICAN MIDDLEINGS PURIFIER COMPANY

v.s.

THE ATLANTIC MILLING COMPANY. IN EQUITY.

A decision of the Supreme Court, although not operating as an estoppel upon others not parties to the suit, is conclusive on a circuit court as to the principles which it decides, and raises a *prima facie* presumption of the validity of patents held valid by it, which requires clear and satisfactory proof to the contrary to rebut.

The action of the Patent Office, in granting reissues, is presumed to be right, and the burden of proving the reverse is on the party alleging the invalidity.

Upon an application for a preliminary injunction, it is for the plaintiff to sustain the allegation of infringement by a preponderance of evidence.

Where the complainant's patents had been sustained by the Supreme Court, and suit was afterward brought against other parties for infringement of them, and the complainant moved for a preliminary injunction, and the defendant denied the validity of the patents and the infringement, and introduced the affidavits of several witnesses denying the infringement, while the complainant introduced but one to sustain it; and it also appearing that an injunction would be a hardship upon the defendant, and no allegation of defendant's insolvency being made: *Held*, that the injunction should not be granted, but that the defendant should be required to keep an account, and report monthly under oath.

(Before MILLER and DILLON, JJ., District of Minnesota, December, 1877.)

MILLER, J.

The bill in this case charges the defendants with infringing several patents issued to William F. Cochrane, all of which have been assigned to plaintiffs. These patents are reissues

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following upon a surrender of original patents, and they relate to the "new process," as it is called, of making a superior flour out of middlings, which were formerly rejected, or, if used, were very inferior in quality and value. The patent of principal importance in the case is for the process by which these middlings are purified and converted into flour, and the others are patents for several machines used in the process.

The bill prays for a preliminary injunction, and due notice of the application was given. The case having been fully heard on affidavits and argument of counsel, we now proceed to its decision. It is proper to add that, before the hearing, the answers of the defendants were filed. The defences are : First, that the patents are invalid ; and, second, that if valid, they have not been infringed by the defendants.

The patents have been found to be valid by the judgment of the Supreme Court of the United States at its last term, in the case of *Cochrane v. Deener*, and a copy of the record of that case is produced as evidence in this case. And while it is conceded that the judgment in that suit is not an estoppel as to the defendants in this, because they were not parties to the former, it is not denied that it is conclusive on this court as to the principles which it decides, and raises a *prima facie* presumption of the validity of those patents, which requires clear and satisfactory proof to the contrary, before it can be rebutted. This proposition was announced in the case of *The American Middlings Purifier Company* (present plaintiff) v. *Christian*, 4 Dill., 448, on a similar application in the Minnesota Circuit Court a few months ago, and we adhere to it now.

To avoid the legitimate effect of that judgment, it is alleged by defendants that the judgment of the Supreme Court was obtained by fraudulent collusion between the plaintiffs and the defendant, imposing upon the court what it believed to be a genuine contest, while in fact it was intended and desired, by both parties, that the patent of plaintiffs should be established by its judgment. There is, in our opinion, a failure to prove this collusion. The fact that the parties to this suit, and others similarly interested, have, during the vacation of the Supreme Court, filed a motion to vacate that

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judgment on that ground, certainly has no tendency to prove it. And scarcely any more weight can be attached to *ex parte* affidavits purporting to retail, at two or three removes by hearsay, the statements of the counsel of one of the parties to that suit. Nor can a presumption of such collusion arise from the fact that the case was heard on printed argument instead of oral, or that the two counsel of defendant, who each presented a printed argument, did not make it longer or fuller.

These arguments in the Supreme Court were very fully considered, and accurate models were examined. A division of opinion in the court caused a protracted examination of the case, which was before the court after its submission some six months—a very rare thing.

It is next urged, that the reissued patents are void because they differ from the originals in important particulars, and contain claims not justified by the originals, and it is said that this question was not before the Supreme Court. It appears to be true that no such question was considered by the court, and if the showing of the defendants here was such as to convince our judgment, or satisfactorily prove that the position is well taken, we should give the defendants the benefit of it. But the action of the officers in the Patent Office in making these reissues, must be presumed to be right, and the burden of proving the reverse is on the defendants. They have produced nothing on that subject but the specifications of the original and reissued patents, and insist that it appears clearly, from a comparison of these, that the reissue is for a different thing from the original.

The comparison, as thus made, and especially when extended to all the patents relating to the same improvement issued to the patentee on the same day, does not satisfy us that the reissues are void on that ground. They are not, in our judgment, sufficient, in the absence of the original applications in the Patent Office, to justify us on this preliminary motion and imperfect presentation of the case, to hold patents which have been passed upon by the Supreme Court, and by the circuit court of Minnesota, void.

The same remarks apply to the next objection to the patents,

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namely, that they were not novel. The principal evidence offered on this subject is an extract from a French publication, which is said to be now in the Patent Office at Washington, bearing a date anterior to the date assigned by Cochrane to his invention. The correctness of the translation offered is disputed. The original is not before us. The whole matter is so imperfectly presented, that it would be a gross injustice to hold the patents void without a more extended examination of the matter. It may be observed in respect to both these objections, that, on final hearing, when the issues are clearly made and seen, and the testimony of witnesses subjected to cross-examination, with the aid afforded to the court by models and drawings illustrated by full argument, they can receive that careful consideration of the court which they cannot here, and which is necessary to justify the rejection of the patents. For the purposes of the present motion, we are bound to treat the patents set up by the plaintiff as valid.

There remains to be considered the question of infringement. The case standing at the head of this opinion was heard and argued with four others, brought by the same plaintiffs for a like infringement by other defendants. In all these cases, the bills charge the infringement, and the answers deny it under oath. It is necessary, therefore, for the plaintiffs to sustain the allegation of infringement by a preponderance of evidence. There is but one witness on the part of the plaintiffs in all the cases. The defendants in each case have introduced several witnesses, who, on oath, deny that the defendants use the process or the machines described in plaintiffs' patent. Looked at in this general way, there is the force of the answer and the more numerous witnesses of the defendants, none of whom are impeached, against the testimony of a single witness.

If we examine more closely the statements of these affidavits, it does not appear that Mr. Page, the witness of the plaintiffs, ever saw any of the machines of plaintiffs, or any model of them, or of the Welch patent. He describes their mode of operation and the process of plaintiffs, from the language of the patent alone. Conceding that he is

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sufficiently an expert to understand this, and taking his description of the mode or process of the defendants, some of which he does not pretend to describe except by reference to others, his affidavit is liable to the objection of a want of minuteness and precision in those descriptions. These affidavits are unaccompanied by any models or drawings of defendants' machines, or anything whatever by which the court can institute for itself a comparison of the processes used by the defendants with those patented by the plaintiff. This is a very serious defect in the presentation of the case.

When the case in Minnesota was before me, several models were introduced, and the patent which defendant used was brought into court, and the actual process of bolting, with the use of the current of air, was put in operation before our eyes. The defendant then claimed that the patent, of which that model was an exhibit, antedated that of the plaintiff and rendered it void. There was scarcely a question that, if it was not an anticipation of plaintiffs' invention, it was an infringement of it. The infringement in that case was but feebly denied, and was manifest. Here it is very different. The infringement is but feebly supported by a single witness, and denied by many.

Mr. Page, himself, seems to recognize two variations of the process of the defendants in all the cases from those of plaintiffs. One of these is, that plaintiffs describe a process by which the middlings are purified in the first separation from the superfine flour, the meal going through a series of reels and bolting cloths, subjected from the beginning to the current of air, and the middlings, when this part of the process is ended, being left in the reel, purified and ready for regrinding. The defendants do not use the air current in the first step of the bolting, but, following the old mode, separate, without the use of the air current, the superfine flour from the middlings, shipstuff, etc., and then taking the middlings, run them through the sieves prepared for the purpose. In the mills of a majority of defendants the current of air is not introduced into the sieve where the middlings are until they have been rebolted several times. The other variation is, that the defendants use the old mode of bolting, by which the meal,

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as it progresses, passes over cloths, the meshes of which are continuously coarser, while with plaintiffs, they grow successively finer.

The result of this is obvious, namely ; that the middlings, with such heavy particles of bran and other impurities as cannot be driven off by the air-blast, all remain in the bolt in plaintiffs' process. These same middlings pass through the bolting cloth in defendants' process and are found in the chest, divided by the relative size of the meshes of the cloth into middlings, shipstuff, etc.

Another variation insisted upon as important by Mr. Harding, is that in all the defendants' processes the current of air is produced by suction, while in plaintiffs' they are created by pressure forcing the air into the machine. We do not think we are called upon to determine with critical accuracy, upon consideration of the doctrine of equivalents, whether these variations, which are apparent now, are such as to exempt the defendants on a final hearing from the charge of infringement. On that hearing, no doubt, much that is obscure will be made clear. Drawings and models will be shown, and witnesses subjected to cross-examination. Other competent witnesses will have opportunity to examine defendants' process. The law of equivalents will be discussed as it has not been now. The decision of the Supreme Court is strong evidence that plaintiffs' patent is valid, and is conclusive that Deener, in the use of Welch's patent, infringed it. But it is no evidence that these defendants have infringed it. The full burden of proving that, rests upon the plaintiffs as an entirely new issue of fact. When we consider the consequences to defendants of stopping their mills by injunction at this season of the year, that we are asked to do this in a summary manner on a hearing at short notice, without the usual test of cross-examining witnesses, we are of opinion that the case which demands such a grave interference with the business of individuals should be clearly made out, and should not rest upon unsatisfactory evidence that the acts charged have been committed. It may be said that, by placing defendants under bonds, as we did in St. Paul, their business can go on without interruption ; but we can only require bonds as an alternative, the

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other branch of which is, that if they do not give bonds, they must be stopped by injunction ; we can only demand a bond, therefore, in a case in which, if it is not given, the injunction must issue.

We do not see that such a case is made in regard to the defendants in either of the cases before us. As there is no allegation of present or threatened insolvency in any of the bills or affidavits, and as substantial precautionary justice can be fully attained by requiring the defendants to keep an account and report monthly under oath, and to submit to a thorough examination of their mills, while in operation, by plaintiffs, their counsel and expert witnesses, we shall make such an order, and deny the injunction.

Judge Treat, though not constituting a part of the court, has heard the case and given us the benefit of his counsel, and agrees to what is here said.

Rodney Mason, John A. Hunter and C. H. Krum, for the complainants.

George Harding and F. N. Judson, for the defendants.

JAMES S. ATTERBURY

vs.

JOSEPH G. GILL, ADMINISTRATOR. IN EQUITY.

A suit in equity is not revived under Rule 56 unless an order to that effect be made.

Proceedings in equity for infringement of patents are not strictly proceedings for torts, and upon the death of the respondent the action survives.

The infringer of a patent is held in equity as a trustee of the owner of the patent, and compelled to account to him for the profits realized from the manufacture of the infringing machine or products.

The infringer is also liable to the patentee for damages for the infringement, and the two causes of action, viz : (1) for profits, and (2) for damages, are combined in a suit in equity for infringement.

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An interlocutory decree establishing the validity of complainant's patent and the infringement thereof was entered, and the case was referred to a master to ascertain the amount of the profits and damages for which the final decree should be passed ; pending the reference the defendant died : *Held*, that the action survived, and that an order of revivor could properly be entered.

(Before WELKER, J., Northern District of Ohio, December, 1877.)

WELKER, J.

The complainant, in original bill, complained against respondent Beatty for infringement of their patent for an improved jelly-glass. Answer was filed by respondent, and testimony taken and hearing had, and decree for complainants, establishing the validity of the patent and infringement by the respondent, and referring it to the master to take account of profits and damages.

After this decree and reference, and before account was taken, the respondent died. After the expiration of rule-day to answer a bill of revivor, under Rule 56, the administrator of respondent filed a demurrer to the bill of revivor, and motion was made by complainant to strike the demurrer from the files. At the time the rule to answer expired, and prior to the filing of the demurrer, no order had been made reviving the suit against the administrator, nor had the administrator obtained leave to file the demurrer :

Held, that, under Rule 56, the case was not revived unless an order to that effect was made, and that, in this particular case, the demurrer was allowed to stand as if filed on rule, and the motion overruled.

In regard to the survivor of actions for infringement of patents against the administrator of the infringer, after a decree for injunction, and reference to master to assess amount for which decree was to be entered :

Held, 1. That although, as a general rule, actions for torts do not survive against the representatives of defendants deceased pending the suit, yet these proceedings in equity for infringement of patents are not strictly proceeding for torts. The respondent who infringes a patent is held in equity as a trustee of the owner of the patent, and compelled to account to him for the profits realized from the manufacture of the

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infringing machine or products. The infringer is also liable to the patentee for damages for such infringement, and both of these causes of action are combined in the case in equity, as well as the prayer for perpetual injunction. 2. That in this case, the decree having settled the question of infringement, and the case having been referred to a master, before the death of respondent, to ascertain the amount for which the decree should be rendered, which will embody either both or one of the claims of complainant, therefore, the action does survive.

The demurrer is overruled, and order of revivor entered.

Bakewell & Kerr, for the complainant.

Prentiss, Baldwin & Ford, for the defendant.

CHRISTOPH REISSNER ET AL.

vs.

S. W. ANNESS ET AL. IN EQUITY.

Proofs necessary upon the trial of an issue raised by a plea alleging new matter in a reissue, considered.

The presumption of law is always in favor of the validity of the reissue.

The burden of proving that the reissue is for an invention different from the original is upon the party alleging it.

Where the question of the validity of the reissue is before the Court as a matter of construction of the original and reissued patent, it is allowable to produce the Patent Office model filed with the application for the original, to aid in determining what was described in such original patent.

(Before NIXON, J., District of New Jersey, December, 1877.)

NIXON, J.

The bill of complainants charges the defendants with the infringement of the reissued letters patent No. 7,751, for "improvement in coal-oil stoves," granted to the complainants

June 19, 1877. The defendants have not answered, but have put in a plea founded upon sec. 4,916 of the Revised Statutes, which provides that, upon a reissue, no *new matter* shall be introduced into the specification. The plea is as follows : " That in the specification of the reissued letters patent set forth in the bill of complaint new matter has been introduced which was not shown or described in the original letters patent, and that said reissued letters patent have therefore been wrongfully issued, and are void and of no effect. The new matter so introduced into the specification of said reissue is all matter relating to ' tubes,' which are therein described as containing the shafts of the wick wheels." The complainants have filed a replication, admitting the sufficiency of the plea, but denying its truth in fact. This, therefore, is the only issue between the parties.

The only proofs in the case have been offered by the complainants. They consist of the original letters patent ; a certified duplicate of the model filed in the Patent Office upon application for the same ; the reissued letters patent ; and the testimony of John A. Frey, the patentee and one of the claimants. The defendants cross-examined this witness, and also exhibited the original letters patent of the complainants, and the reissue on which the suit was brought, and then closed their case. Unless, therefore, it appears, on a comparison of the reissued letters patent with the original patent, as a matter of legal construction, that the reissue is not for the same invention, and contains matters not described or indicated in the original, or unless the introduction of new matter can be properly inferred from the testimony of the patentee, the defendants have failed to support their plea, and there must be a decree for the complainants. The presumption of the law is always in favor of the validity of a reissue. Any one alleging the contrary must show that it is for a different invention by satisfactory proof, or point out the new matter which constitutes the difference.

The complainants insist that the drawings and specifications of the original patent show the tubes that contain the shafts of the wick-wheel, which the defendants allege to be the new matter in the reissue, and the testimony of Mr. Frey seems to

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support the insistment. But, in addition to this, they produce a certified duplicate of the model which was filed in the Patent Office accompanying the drawings and specifications of the original patent, and this model plainly exhibits the tubes.

The counsel for the defendants objects to a resort to the Patent Office model in determining what was described in the original patent. But this is clearly allowable. The object of the reissue, and the reason why the right is given, are to correct defective or insufficient specifications, whereby the patent is inoperative or invalid, and anything appearing in the model, which is the embodiment by the patentee of his invention, can hardly come within the designation of *new* matter in the reissue, because it is not fully described in the claim, specifications and drawings of the original.

The Supreme Court, in *Seymour v. Osborne*, 11 Wall., 545, in considering the differences between the reissue and the original patent, which would render the former void, say, that the patentee, under an application for a reissue, cannot make "material additions to the invention, which were not described, suggested, nor substantially indicated in the original specifications, drawings, or Patent Office model." And the justice and judge of this circuit, in *Parham v. Am. Buttonhole, &c., Co.*, 4 Fish., 472, said that the alleged discrepancy between the original patent and the reissue is not to be determined "by a reference exclusively to the two specifications: the drawings and model filed with the original specification are also proper subjects of consideration, and are often of decisive weight." Nor do I find any evidence in the examination or cross-examination of the witness Frey which tends to establish the truth of the plea.

Upon the issue made by the pleadings there must be a decree for the complainants, with costs, and it is ordered accordingly.

B. F. Lee, for the complainants.

A. V. Briesen, for the defendants.

LORIN INGERSOLL

v.s.

DARIUS BENHAM ET AL. IN EQUITY.*

Under the circumstances of this case, the court refused to open an interlocutory decree.

(Before WHEELER, J., Southern District of New York, December, 1877.)

WHEELER, J.

This cause has been heard on the petition of the defendants to open the interlocutory decree heretofore entered therein, because of the discovery of new matter and the failure of their then counsel to fully represent their interests, and the answer of the orator thereto. It appears therefrom, that there has been no discovery of any new evidence, but only a discovery of a new use of that which was before well known. It is not claimed but that the facts were all fully known to the defendants and their counsel, but that the Circuit Court of the United States in the District of New Jersey has made a decision upon the facts, which they did not know of, and the like of which neither they nor their counsel saw fit to ask to have made here. If that was the only decision that had been made, and the question was open, doubtless, it would have great and, perhaps, controlling weight here. But, not only is the question foreclosed by this interlocutory decree, but also by a judgment the same way in an action at law, on the law side of this court, between these same parties. So that, if this decree were removed, that judgment would still stand as a conclusive adjudication of the rights of the parties involved, which would bind the court to make the same decree again. Therefore, it would be useless to open the decree, under the circumstances, if it was allowable, under

* 14 Blatchf. C. C. R., 362.

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the usual rules applicable, to open a decree for such a reason. But, further, the reason is not adequate. The decree in the District of New Jersey might as well be opened on account of the one here, as *vice versa*.

There is nothing to show but that the defendants were in fact fully and properly represented by their counsel, according to his best judgment. The petition alleges, in substance, that they did not know he was so situated that he could not so represent them, but scarcely, if at all, sets forth that, in fact, he was so situated. But, if it be taken as an allegation to that extent, the allegation is not admitted in the answer nor proved evidence, and it would be unsafe and unjust, not only to the orator but to the solicitor, to assume that he did not do his full duty, without full proof that he did not.

Let the petition be dismissed.

Frederic H. Betts, for the complainant.

Benjamin F. Lee, for the defendants.

JOHN W. LABAREE ET AL.

vs.

THE PEORIA, PEKIN AND JACKSONVILLE RAILROAD
COMPANY. IN EQUITY.

The presumption is that a sale of letters patent puts an end to powers of attorney relating thereto previously executed ; but if such a power of attorney is allowed to remain outstanding, and third parties deal with the attorney on the supposition that it is still in force, they will be protected as against the owner of the patent, for, if one trusts an agent, and in consequence thereof, another suffers, the party conferring the agency must bear the loss.

A court of equity will look at the real state of the case, and regard that as done which ought to be done ; so that, if a contract is actually made by which the owner of a patent is bound, a court of equity will disregard the form of its execution.

(Before DRUMMOND, J., Northern District of Illinois, December, 1877.)

Labaree v. Peoria, Pekin and Jacksonville Railroad Co.

The complainant, Dunbar, having invented an improvement in pistons and piston-packing for steam engines, on August 14th, 1860, obtained letters patent therefor, and on March 19th, 1861, conveyed to one Parker Wineman his rights in the patent, so far as concerned its use upon locomotives on railroads having their principal offices in the State of Illinois for the full term of the patent, subject to a royalty of \$25, reserved by the inventor, for each locomotive upon which Wineman should authorize the patented article to be used. On the occasion of the first sale of the right being made by Wineman under his conveyance, the railroad company to which he sold demanded authority to use the improvement under any extension of the patent which might thereafter be granted to the patentee or his assigns. Wineman having no right to grant this authority, Dunbar joined with him in the execution of the license to that company, and to obviate the necessity of his so joining in cases of future sales, he gave Wineman a power of attorney, March 8th, 1862, authorizing the latter to attach the former's signature to any agreement he might make in regard to a license of the use of the invention under an extension of the letters patent, it being understood between them, however, that such extension should not be contracted for except where specifically required by the railroad companies to whom Wineman might effect a sale. On January 7th, 1863, a new contract was entered into between them, under the terms of which Dunbar's royalty was reduced from \$25 to \$10 per locomotive, the new agreement embodying a clause specifically authorizing Wineman to vend the use of the patent in Illinois, for the full term of the letters originally issued and also for the period of any extension thereof which might be granted. In May or June, 1863, Dunbar repurchased of Wineman all the rights previously acquired by the latter, giving him notes to the amount of \$2000 therefor. Wineman, however, retained possession of the power of attorney of March 8th, 1862, which had never been placed on record or out of Wineman's control. On September 21st, 1863, Dunbar, finding that he could not pay his notes as they matured, and being disappointed as to certain sales in Illinois which he had hoped to make, gave Wineman \$500 in money, and full

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rights on the patents in Illinois, free from royalty, for a surrender of his indebtedness.

It appears, though not without denial, that at this time a conversation occurred between them in reference to a future extension of the patent, which resulted in an understanding that as Wineman continued to hold Dunbar's power of attorney of March 8th, 1862, he should use it when necessary, and the right to license the use of the patent after the original term had expired need not be incorporated in the conveyance of September 21st, 1863—leaving that right to be exercised or not as the purchasers might require. The right to so license the use of the patent for an extended term was not, in terms, conferred upon Wineman by the conveyance then executed. On September 23d, 1863, Dunbar assigned a half interest in the patent, and in any extension thereof, to his co-complainant Labaree. In January, 1865, Wineman wrote to Dunbar: "I have sold to six roads and none of them have the extension * * * of course they will have to get it from you. * * * From all the roads you can realize a good many thousand dollars, if you get your invention extended."

On March 25th, 1867, Wineman sold to the defendant, The Peoria, Pekin and Jacksonville Railroad Company, the right to manufacture, apply and use the invention upon all its locomotives and engines of every kind, for which the company gave him its promissory note for four hundred dollars payable in sixty days.

The note provided that if paid at maturity, Wineman should execute and deliver to the company a good and sufficient conveyance of the right to use the patented article on its engines and "all the right, title, and interest of the said Parker Wineman, in said invention, so far as the same is applicable to the uses of said company, during the full time of the continuance of said letters patent and of any extension of time which may hereafter be made." The note being paid at maturity, Wineman returned it to the company, and at the same time delivered to the latter a license executed in his own name, omitting a clause specifically or by implication conferring upon the company any rights other than for the term of the original patent.

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On August 14th, 1874, the term of the original letters patent having expired, the complainants on that day obtained an extension for seven years. On March 2d, 1876, Wineman executed a paper purporting to convey to all railroads, to which he had theretofore issued licenses, the rights to use the patented article for the extended term as fully as though the extension had been mentioned in the original deeds to them. Afterward (the date not appearing), Dunbar, by service of a notice upon Wineman, attempted to revoke the power of attorney of March 8th, 1862.

In this state of the case, the defendant having continued to use the Dunbar invention upon its locomotives after the original letters patent expired, in some cases manufacturing and using new pistons after that date, a bill was filed for an accounting and for an injunction to restrain the alleged infringement of the complainants' rights under the extension of August 14th, 1874. No claim was alleged against the defendant for its use of the patent during the original term.

The motion for an injunction was not pressed until a hearing upon the bill, answer and proofs.

The defendant relied upon its license from Wineman.

Counsel for the complainants argued that, it being admitted by the defendant that it was using the improvement in pistons for steam engines patented by Dunbar, and had renewed the same on some of its locomotives since the expiration of the original patent, the only question was whether the defendant was authorized, under the license from Wineman or its agreements with him, to use the patented device during the extended term of the patent. He insisted that :

1. The assignment of September 21st, 1863, for the original term of the patent, was the only paper in force after its date under which Wineman had any right or authority to act in reference to the patent, and hence that his license to the defendant could only cover the original term of the patent, and not the extension. If this be true, then any renewal of the patented device after the expiration of the original term was unauthorized and an infringement of the patent. Curtis on Patents, Secs. 198-210.

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2. The power of attorney of March 8th, 1862, was not in force at the time the defendant received its license from Wineman, but had become extinguished by the assignment of January, 1863, and subsequent agreements of that year. 2 Blackstone's Com., 177; Farwell on Powers, 23-28; Ibid., 83; *Wheate v. Hall*, 17 Ves., 80; Story on Agency, Secs. 486-9; 2 Livermore on Agency, 306; Sugden on Powers, 54; 4 Kent's Com., 346.

3. But even if such power of attorney continued in force, Wineman had never properly exercised his authority under it to grant a license to the defendant for the extended term of the patent. The licenses offered in evidence had been signed in his own name, and not in Dunbar's name by him as attorney in fact, and were, therefore, his own deeds, and not the deeds of Dunbar. Story on Agency, Secs. 147 to 165 and notes; 3 American Jurist, 65 to 87.

4. The defendant had acquired no new rights under the confirmatory license of March, 1876, because: 1. It paid no new consideration for it. 2. It then had full notice of complainant's rights. 3. It was not delivered until after Dunbar had revoked the power of attorney. 4. It was merely the deed of Wineman and not of Dunbar.

Counsel for the defendant contended that the defendant, in good faith, asked for, bought and paid for the right to use the patented device on its road, as well for the term of the extension of the letters patent as for the original term. The main question was: Had Wineman authority from Dunbar to convey it? They argued that:

1. When Wineman, with the power of attorney in his possession, sold back to Dunbar all his rights in Illinois, perhaps, by operation of law, the power of attorney was revoked, but when Dunbar reconveyed to the former, with renewed privileges, it was treated as continuing in force. They thereby gave it new life; it was coupled with an interest in Wineman; and Dunbar had no power to revoke it without the former's consent.

2. But even if it did not continue in force as between the parties to it, yet, as to third persons dealing with reference to the authority it purported to confer upon Wineman, while still

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in his hands, it remained in full force and effect. *Beard v. Kirk*, 11 N. H., 397..

3. Although it is true that the license to the defendant was executed in the name of Wineman alone, when his authority was to use Dunbar's name, yet ; 1. A court of equity will regard that as done which ought to be done ; and 2. Wineman's authority having been shown to have been coupled with an interest, it was properly executed in his own name. Story on Agency, Sec. 164 ; *Ibid.*, 483.

DRUMMOND, J.

It is rather difficult to determine what are the actual facts in this case, upon which the controversy arises, and I have come to the conclusion that I will decide it in favor of the defendant, on the ground that the plaintiffs have, by their conduct and action, enabled their agent, Wineman, to make a contract with the defendant under such circumstances that it had the right to assume that he was properly representing the patentee. It is not easy to reconcile all the various facts that appeared in the case, and that are stated by the two principal witnesses, Dunbar and Wineman, but conceding that the interest of Wineman in the subject matter of the patent was terminated by the repurchase by the patentee, Dunbar, of the right to the patent in the State of Illinois, I am inclined to think that when he sold again to Wineman, it was contemplated by the parties that the latter should have the same right he previously had over the patent in the State of Illinois, namely, that he should have the right to the use of the patent, during the life of the original patent, and during its extension. I concede the presumption is that when the resale of the right in the State of Illinois took place, when the right was reinvested in Dunbar, it put an end to the assignment that had been made to Wineman by Dunbar, and also to the power of attorney that had been executed, and that something beside must take place in order to re-clothe Wineman with the right vested in him by the power of attorney. It is certain that when Dunbar made the last transfer to him, he did not, by its terms, vest in the agent any right which might exist in the patentee by virtue of the renewal of

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the patent. But it is stated by Wineman, and I am inclined to think the statement is true, that when the attention of Dunbar was called to the fact that the extension was not mentioned in the deed, he spoke of his still having the power of attorney. We may assume, under all the circumstances of the case, that Dunbar knew that the power of attorney still remained in the hands of Wineman, and although, as a matter of law, its power might be spent, still we must visit upon Dunbar some of the consequences of his allowing it to remain in the hands of Wineman. He ought to have taken it up; then there would not have been the same effect given the testimony that I am bound now to give it, in consequence of the power being permitted to remain in the possession of Wineman. According to the testimony of the latter, Dunbar said, in effect: "It is possible that the roads will not ask for the use of the patented device during the extension, and if they do not, then you need not grant it to them, but if they do, you have the power of attorney and you can use it; you can give it to them." This is often reiterated with every variety of phrase and form in the testimony of Mr. Wineman, and his testimony is rather more distinct and explicit than that of Dunbar's, and he is, besides, a disinterested witness, that is to say, he has no direct interest in this controversy as Dunbar has. The only thing which appears to throw some doubt upon this statement is the letter written by Wineman on the seventh of January, 1865, in which he says: "I have sold to six roads, and none of them have the right of extension. The Great Western, that you and I both sold to, has it, but the six I sold to of course will have to get it from you. I think it is a good job; from all the roads you can realize a good many thousand dollars if you get your invention extended."

"If you get your invention extended," so that it is clear that at that time the writer of the letter did not suppose, or he assumed, that it had not been extended; that was a contingency which might or might not happen. In one reading of this communication, and in one view of it, it would seem to be inconsistent with the position which Wineman now maintains, that he had authority, as he had by his original power of attorney, to make grants including the extension.

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But, in another aspect, and read in another light, it is possible that it can be reconciled with the other view, and in consideration of all the testimony bearing upon the case, and of this particularly, that if a man trusts an agent and in consequence of the trust another person suffers, the party conferring the agency must bear the loss—the party who has been the means of giving the authority must suffer rather than the other. And again, there is some little significance, I think, in the fact that at a subsequent time Dunbar did revoke, in a formal way, the power of attorney. I do not lay much stress upon the confirmatory statement made on the second of March, 1876, because I assume that it was a contract made by the agent with the defendant that there was to be included, when the money was paid, and it was so understood, the right of the extension as well as the right of the original patent. I dismiss as not worthy of any very serious consideration, the question whether or not Wineman signed the papers in proper form or executed them in a particular way. I do not think it is material, when we look at it as a matter of pure equity, whether he signed it as Wineman, or Dunbar by Wineman. A court of equity will look at the real state of the case, and so regarding it, will consider that as done which ought to be done. So that if a contract was actually made by which Dunbar was bound, and the extension of the patent was intended to be conveyed, a court of equity will treat it as done to carry out the purpose of the parties.

It is a question by no means free from difficulty, but on the whole, I think I shall have to dismiss the bill.

Decree accordingly.

Banning & Banning, for the complainants.

McCagg, Culver & Butler, for the defendant.

Comstock v. Sandusky Seat Co.

THEODORE COMSTOCK ET AL.

vs.

THE SANDUSKY SEAT COMPANY ET AL. IN EQUITY.

The invention of a patented device may be fairly held to date back to the time when the inventor made models, and entered into a contract for its manufacture.

The mere making of an article, more than two years prior to the time of the application for a patent, is immaterial, and, where the evidence raises a doubt as to the fact of public use or sale for more than two years prior, such doubt should be resolved against the defendants, upon whom rests the burden of proof.

The patent is *prima facie* valid. It is a muniment of title. He who would overcome it must do so by a clear preponderance of evidence.

A defence that the invention involved simply the substitution of one material for another, and was, therefore, not patentable, not having been set up in the answer, the objection was overruled.

Reissued letters patent No. 4,780, granted to the complainants, assignees of S. B. Graham, for improvement in carriage bodies and seats, *held* valid.

(Before SWAYNE and WELKER, JJ., Northern District of Ohio, January, 1878.)

WELKER, J.

This suit is brought upon reissued letters patent No. 4,780, granted to the complainants, Theodore Comstock, Ezra Booth, and Henry F. Booth, as assignees, by mesne assignment, of Simon P. Graham, March 5th, 1872, for improvement in carriage bodies and seats.

The defences are, severally, (1) non-infringement, and (2) invalidity of the patent. The invalidity alleged being (1) anticipation, (2) prior use, (3) abandonment, (4) public use for more than two years prior to application for complainants' patent, (5) that reissue was for a different invention from the original, and (6) the existence of a prior Canadian patent, etc.

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We have carefully considered the evidence and arguments of counsel, and now state our conclusions.

(1.) It is not controverted that Graham's invention was perfected, and that he made two seats as described in his patent, prior to April, 1867.

(2.) He applied for his patent August 9th, 1869. The patent was issued October 5th, 1869, and was reissued March 5th, 1872, upon which reissue this suit is founded.

(3.) At the close of the argument we were satisfied that the patent of the complainants was valid unless successfully assailed (1) for want of novelty with respect to the invention, or (2) by reason of the sale and use of the thing patented more than two years prior to the application for the patent, that is, more than two years before August 9th, 1869—in other words, before August 9th, 1867. These points we have carefully considered in our further examination of the case.

(4.) As to the priority of invention, our attention was particularly called to the claim in behalf of Burt. Upon examination of the testimony bearing upon the subject, it seems to us clear that it is not shown that anything that was done by Burt was not done later than April, 1867. It is clear upon the proofs that Graham perfected his invention, made models, and took them with him to Wauseon, and there entered into a contract with Stebbins for the manufacture of the seats in November, 1866. His invention, according to the record, may be fairly held to date back to that time. But this is immaterial, as nothing is shown as to any other party, which antedates the time fixed by the admission of respondents' counsel, which is before April, 1867. The other cases of alleged prior invention are unsustained. It is unnecessary to remark further in regard to them.

(5.) As to the use and sale of the thing patented. (1.) The Stebbins contract. This contract was entered into by Graham & Stebbins in November, 1866. No seats were completed by them. Two were partly made when the contract was put an end to, and Stebbins retired. Graham alone completed these seats. The mere making them without anything more was immaterial; but (2) Graham sold one of them, after they were completed, to Ben Smith, with a buggy, of which

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it was a part. The date of this sale is important in the case. The testimony upon this point is very conflicting; upon the whole, it does not satisfy us that the sale was made before August 9th, 1867. We are brought to the conclusion that it was not. If the evidence, however, raised a doubt, which we think it does not, such doubt, it is well settled, should be resolved against the respondents, upon whom rests the burden of proof. *Coffin v. Ogden*, 18 Wall., 120. This rule is founded in justice and good sense. The patent is *prima facie* valid. It is a muniment of title. He who would overcome it must do so by a clear preponderance of evidence.

(6.) We are in some doubt as to the point whether the invention is not in substance only the substitution of one material for another, iron for wood, and whether, hence, there is not a want of patentability. *Hotchkiss v. Greenwood*, 11 Howard, 248. This defence is not set up in the answer, as it should have been; but, possibly, the bill shows no equity on its face, and perhaps the facts are such that the court can take judicial notice of them. *Brown v. Piper*, 1 Otto, 37. But in view of the decision in *Smith v. Goodyear*, 3 Otto, 486, we are inclined to think we ought to overrule this objection, and leave the respondents to raise the question, if they think proper to do so, in the Supreme Court, by appeal.

(7.) The infringement complained of is made out by the evidence.

Upon the whole case, then, we think there should be a decree for the complainant, which we direct to be entered, and the usual reference to commissioner to report account and damages.

Hatch & Parkinson, for the complainants.

M. D. Leggett & Co., for the defendants.

THE BRANDON MANUFACTURING COMPANY

vs.

DAVID W. PRIME ET AL. IN EQUITY.*

Where a person commences a suit in equity in this court, and the defendant in such suit files a cross-bill against him, in this court, he cannot set up, as a ground of demurrer to such cross-bill, that a State court had acquired prior jurisdiction, on a bill brought in that court for the same relief, by the plaintiff in such cross-bill.

Where a demurrer to the whole of a bill sets up that some of the relief prayed is not cognizable in equity, it will be overruled, if some of the relief prayed is properly prayed.

A cross-bill is properly filed to establish an equitable title to letters patent, the legal title to which is in the plaintiff in the original bill filed for an infringement of such patent.

Where a cross-bill, brought for relief as well as defence, shows that persons not parties to the original bill are necessary parties to the cross-bill, they may properly be made such.

(Before WHEELER, J., District of Vermont, January, 1878.)

WHEELER, J.

This cause has been heard on the several demurrer of defendant Strong, and joint demurrer of defendants Prime, Meacham, and Luce, to the cross-bill. The causes of demurrer assigned are the same in each. They are, in substance, that this court has not jurisdiction, because the Court of Chancery of the State had acquired prior jurisdiction, on a bill brought by the orator in the cross-bill, there, for the same relief; that some of the relief prayed is not cognizable in equity; that some of the subjects of the cross-bill are not the same as those of the original bill; and that Strong and another, made parties to the cross-bill, were not parties to the original bill.

Both are demurrers to the whole bill.

* 14 Blatchf. C. C. R., 371.

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The orators in the original bill commenced the litigation involved in this court, and compelled the orator in the cross-bill to come here and join in it. Having brought it here they have no right to say that the whole or any part of it belongs anywhere else. If the cross-bill is appropriate to the original, it must relate to the subjects of it and embrace a part, at least, of the litigation introduced by it, so that, by filing the cross-bill, the orator in that has merely met those in the original where called upon by them to meet them. For this reason, a plea of jurisdiction in another court is not a good plea to a cross-bill. 2 Dan. Ch. Pr., 4th Am. ed., 636; Welford's Eq. Pl., 229; *Earl of Newburg v. Wren*, 1 Vern., 220. And, for the same reason, it is not necessary to show, in a proper cross-bill, that the relief sought by it is cognizable in equity. Story's Eq. Pl., § 399. It has not been claimed in argument, and could not successfully be claimed, but that this cross-bill relates to the subject of the original in some respects, nor but that some of the relief prayed in the cross bill is properly prayed. And it follows, that some of it is proper to be answered, in some form, by some of the parties; and, that some of it may not be, is no good reason for not answering what should be answered. As the demurrers are to the whole, and a part, clearly, should be answered, and the demurrers must be overruled or sustained as a whole, as to the causes relating to jurisdiction and relief, they must be overruled.

So far as the defendants Prime, Meacham and Luce are concerned, it would be sufficient to say, as to the other causes of demurrer, that, because other parties are improperly called upon to answer the cross-bill in this form, is no good reason why they, who are properly called upon to answer it, should not do so. But, if the others are properly called upon to answer it, *a fortiori*, they are, and should answer it.

The question hereupon is, merely, whether the cross-bill should be answered at all or not by these other parties. That depends, of course, upon whether the subjects of it are so presented here by it, that they are properly called upon to answer it, in the form in which they are presented. The original bill sets forth, in substance, that the orators in that

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have a patent that the orator in the cross-bill is infringing, and prays appropriate relief. The cross-bill sets forth, that the defendant Strong had the record title to the patent, and the orator the equitable title to it, and that the orators in the original bill acquired Strong's title, with notice of the outstanding equity, and were endeavoring to assert it against the equitable title, and prays restraint and a conveyance. It is, unquestionably, the proper office of a cross-bill to afford relief in such a case, if the case is made out. Story's Eq. Pl., § 391; *Calverley v. Williams*, 1 Ves. jr., 210. A cross-bill is like an original bill, except that it must rest on what is necessary to the defence of an original bill. In an original bill, brought by the orator in the cross-bill, for the same relief, there could be no fair question but that these new parties, of whom Strong is one, would be proper parties. In this original bill, as it is framed, these do not appear to be necessary parties, but, when the facts set up in the cross-bill appear, they become so. Following the ordinary rule, when the orator in the cross-bill resorts to it for defence and relief, and makes it appear that they are not only proper but necessary parties to the litigation, that orator not only might, but ought, to make them parties. If there were no authorities, and no practice on the subject, on principle, that would seem to be the proper course. That the practice in this State, which professes to follow the English Chancery practice, the same that is followed in this court, would warrant making him a party, is well known, and appears in the State Reports. *Blodgett v. Hubart*, 18 Vt., 414. It does not appear expressly, from such English reports or text-books as have been examined, what the actual practice in such cases there has been. In this country, in *Curd v. Lewis*, 1 Dana, 351, a decree was reversed, for the reason that an assignor of the subject of litigation in an original and cross-bill was not a party to either, and should have been made a party to the cross-bill, and that he might be made such a party. *Wickliffe v. Clay*, Id., 585, was heard by consent only, without making a party that by the cross-bill appeared necessary, a new party by the cross-bill. In *Sharp v. Pike*, 5 B. Mon., 155, a new party was added by cross-bill, against his own ex-

press objection. In *Walker v. Brungard*, 13 S. & M., 723, new parties were added, and new matters brought in, by cross-bill, and heard without objection. In disposing of the case, the Chancellor, delivering the opinion of the court, said, that, if they had been objected to, the new matters would all have been kept out, without saying that the new parties would have been. In *Costers v. Bank of Georgia*, 24 Ala., 37, it was expressly held that new parties should be added by cross-bill, when so interested in the litigation involved by it, as to be proper parties to it.

Opposed to all this, there is the remark of Mr. Justice Curtis, in *Shields v. Barrow*, 17 How., 130, and the reasons given by him in support of it, to the effect, that new parties cannot, in any case, properly be added by cross-bill, without citing any authority for it, and books and cases that have followed that remark without citing any other authority. That precise question was not involved in that case, but the mere *dictum* of such a judge of such a court would ordinarily be followed, especially by lower courts. An examination of his reasoning shows, that he made the suggestion without much examination, probably, and his reasoning does not cover the whole ground as to all classes of cases. The modes of procedure he suggests would probably be ample in all cases of cross-bills brought for discovery in aid of a defence merely to the original bill, but not in cases of those brought for relief as well as defence, where new parties would be necessary to the relief sought. As in this case, the methods he states as the proper ones, if successfully followed, would enable the defendant in the original bill to defeat the orator therein, but not to reach the affirmative relief prayed in the cross-bill, if entitled to it. Weighty as that remark is, it is not thought to be sufficient to control the reasons and authorities to the contrary of it. The result of what is thought to be the soundest reasoning, and the best considered authorities, is, that, where a cross-bill shows that there is a party to the subjects of the litigation as presented by it, who has not been before made a party nor appeared to be a necessary one, and then does appear to be such, that party should be brought in by the cross-bill.

The result is, that this cross-bill should be answered by all

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those made defendants to it. The demurrers are overruled, and it is thereupon ordered that the defendants to the cross-bill answer over.

Aldace F. Walker and Chauncey Smith, for the complainants

Wheelock G. Veazey and Henry D. Hyde, for the defendants.

BULLOCK PRINTING PRESS COMPANY

vs.

GEORGE JONES, AS TREASURER OF "THE NEW YORK
TIMES" ET AL. IN EQUITY.

The invention described in the specification of complainant's patent for an improvement in printing machines, being for the employment of a yielding sheath in two strips, pressing outward, one on each side of a fixed knife in a revolving cylinder, for two purposes; one to hold the paper firmly against the edges of the groove for the knife in the opposite cylinder while the knife severs it, the other to hold the end of the web till it is taken by other machinery and drawn along for the next operation; and the ninth claim of the patent being for the combination of the sheath with the fixed knife in the same cylinder: *Held*, not anticipated by a combination composed of a springing knife, with a sheath in the same or opposite cylinder.

The rules of law applicable to the test of the originality and priority of an invention, considered.

The prior knowledge and use of the invention by others which will invalidate a patent, explained.

After suit brought, the defendants stopped using the infringing device, but did not disclaim the right to it: *Held*, not a reason why a decree for an injunction should not be granted.

Where the proofs at the final hearing showed that there can have been no profits from the infringement, and it does not appear whether or not complainant suffered damage therefrom: *Held*, not a reason why a decree for an account should not be granted.

(Before WHEELER, J., Southern District of New York, January, 1878.)

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WHEELER, J.

Upon hearing this cause on bill, answer, replication, proof and argument of counsel, it appears that the orator is the owner of patent No. 38,200, dated April 14th, 1863, issued to William Bullock, Calvin Adams and George S. Selden, for an improvement in printing machines alleged to have been invented by Bullock. The foundation of the claim for relief in this suit is that part of the patent embraced in the ninth claim, and the corresponding part of the specification. The defendants resist the claim for relief on the ground that this part of the patent is invalid for the reason that, as they claim, Bullock is not the original and first inventor, and also for that, according to the construction of the patent they insist upon, they have not infringed upon it.

They set up in their answer, in support of their claim of prior knowledge and use by others, an English patent to one Cowper in 1828, a description of which was deposited in the Astor Library in New York; a patent to one Beaumont in 1853; to one Beach in 1857; to Hoe, in 1859; and prior knowledge and use by Hoe and one Tucker. They have also put in evidence a provisional specification for a patent filed by one Green in 1853.

The specification in Beach's patent describes some devices as being such as may be used—which are more like those in the orator's patent in this respect than any of the others except Tucker's, and have been principally relied upon in the argument, with Tucker's, to show that Bullock was not the original and first inventor of this contrivance. This part of the orator's patent is for the employment of a yielding sheath in two strips, pressing outward, one on each side of a fixed knife in a revolving cylinder, for two purposes; one to hold the paper firmly against the edges of the groove for the knife in the opposite cylinder while the knife severs it, the other to hold the end of the web till it is taken by other machinery and drawn along for the next operation. Beaumont's patent was for a knife moved by a lever and cam outward. Beach's was for an improvement on Beaumont's in respect to the method of moving the knife, and mentions such strips as compose this sheath in connection with an outward moving, but not with a fixed knife.

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This patent is really for the combination of the sheath with the fixed knife in the same cylinder. The other combination is of a springing knife, with a sheath in the same or opposite cylinder, and is essentially different.

The prior knowledge and use by Hoe and Tucker were the same, and rest upon the testimony of Tucker, not, however, in any wise controverted. Nor is it disputed that the device put together by them, as stated in his testimony, was substantially the same as that invented by Bullock. Nor is it claimed upon any evidence that Bullock in any way learned of this device from Hoe or Tucker, or from their invention, nor that he is not an original inventor of it, believing himself to be the first inventor, but only that in fact he was not the first inventor. From the testimony of Tucker it appears that they made this device for a part of a machine to be called a perfecting-press, which they never completed, and that they kept this part of it so far to themselves that they did not give it to the public, nor suffer them to acquire it under a patent or otherwise until long after Bullock's invention.

The statutes on this subject, as embodied in sections 4,886 and 4,920 Revised Statutes U. S., would defeat the patent and orator's right of recovery, if the invention was known to or used by others in this country, or if Bullock is not only an original, but also the first inventor of it.

In *Gayler v. Wilder*, 10 How., 492, Taney, Ch. J., delivering the opinion of the majority of the court upon the effect of these statute provisions in connection with others bearing upon their construction, said that "by knowledge and use the legislature meant knowledge and use existing in a manner accessible to the public." That when the means of obtaining the knowledge would not be within their reach, as far as other interest was concerned, it would be the same as if the improvement had never been discovered. And when an inventor by the efforts of his own genius brings an invention to them, and places it in their possession, the law regards him as the original and first inventor, and protects his patent, although the improvement had been invented before and used by others. Upon this construction of the law, Bullock, although

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not literally the first, is in law the first inventor of this improvement, and the knowledge and use of it by Hoe and Tucker, as stated, do not invalidate the patent.

It further appears, that when this suit was brought the defendants were using a yielding sheath composed of strips, one on each side of the knife, as described in the orator's patent, but not grippers to seize and conduct forward the end of the web. The patent, as to this part of it, is for a new combination and arrangement of known parts, and not for any of the parts by themselves. If the true construction of the language of the patent is, that the grippers are a part of the combination patented, as has been urged for the defendants, the combination used by them may be so different from that patented in the orator's patent that the use by the defendants is not an infringement. But the grippers are not mentioned in the claim as any part of the device for which the patent was claimed. They are referred to in describing one of the purposes of the invention, but not as a part of the invention itself. It is not considered that this reference to them included them in the combination patented. So it appears that the defendants were using the device patented, and infringing the patent. After the suit was brought they stopped using it, and commenced using something else, according to the testimony, of equal advantage to them. It is suggested that because they have stopped using it there should be no decree for an injunction, and that there can have been no profits, and for that reason there is no occasion for an account. But the defendants have not disclaimed the right to use the invention, nor does it appear that the use which was an infringement may not have occasioned damage to the orator, although not advantageous to the defendants, and besides, there may be other evidence as to profits on an accounting. It is ordered, hereupon, that a decree be entered for an injunction and account, with costs to the orator.

B. F. Lee and F. C. Bowman, for the complainant.

Charles F. Blake, for the defendants.

THE HOPKINS & DICKINSON MANUFACTURING COMPANY

*vs.*P. AND F. CORBIN ET AL.

SAME

vs.

THE PARKER & WHIPPLE COMPANY ET AL. IN EQUITY.*†

The claim of the reissued letters patent, granted October 11th, 1875, to the Hopkins & Dickinson Manufacturing Company, as assignees of George McGregor and George Voll, for an "improved sash-lock or sash-fastener" (the original patent having been granted to said Voll and McGregor, as inventors, March 30th, 1869), namely, "A vibrating lever, provided with a bolt, in combination with a striking-plate or hook, and with a catch-segment behind which the bolt can pass, formed upon the plate upon which the lever is pivoted, the whole constituting a sash-fastener, and the parts enumerated in the claim being and operating substantially as specified" does not include a vertically moving bolt in combination with a socket upon the base-plate.

Where a patented invention is merely a combination subordinate to pre-existing devices, and has been limited to such sub-combination by the language of the claim, the patentee cannot successfully insist that he is entitled to cover by such claim the pre-existing devices; and this is true where one of the joint inventors of the junior invention is also the inventor of the senior inventions.

(Before SHIPMAN, J., District of Connecticut, January, 1878.)

SHIPMAN, J.

These two cases are separate bills in equity, wherein the defendants in each case are charged with an infringement of reissued letters patent, dated October 11th, 1875, and issued

* 14 Blatchf. C. C. R., 396.

† Affirmed by Supreme Court, 13 Otto, 786.

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to the plaintiffs, as assignees, by mesne assignments, of George McGregor and George Voll. The original patent to Voll and McGregor was dated March 30th, 1869. The invention is an improved sash-lock or sash-fastener. An ordinary form of sash-lock consists of a base-plate fastened to the top rail of the lower sash, a striking-plate or hook-plate fastened to the bottom rail of the upper sash, and a vibrating lever, which is pivoted upon the base-plate, and which engages with each plate so as to prevent either sash from being opened. In the invention which is described in the reissue, a bolt is mounted in and moves with the vibrating lever, which bolt slides backward and forward in a line parallel to the axis of the lever. When the lever is in proper position, as the bolt slides forward, it shoots beyond a catch segment or projection upon the base-plate, so as to hold the vibrating lever and prevent it from being turned until the bolt is retracted. When the bolt is retracted, and is disengaged from the catch segment, the vibrating lever can be turned and the sash can be opened. The improvement is one form of a self-locking sash-fastener, the object of which is to prevent the lever from being moved by a knife inserted between the sashes from the outside of the window. The claim of the reissue is "A vibrating lever, provided with a bolt, in combination with a striking-plate or hook, and with a catch-segment, behind which the bolt can pass, formed upon the plate upon which the lever is pivoted, the whole constituting a sash-fastener, and the parts enumerated in the claim being and operating substantially as specified."

The defendants' devices are substantially alike. Each has a base-plate, a vibrating lever mounted upon the base-plate, a bolt mounted upon and moving with the vibrating lever, a striker-plate or hook, and a socket or depression upon the base-plate so formed as to receive the bolt which moves up and down. The difference between the plaintiffs' and defendants' devices consists in the fact that, in the defendants' devices, the bolt moves in a line perpendicular to the line of the lever, instead of moving in a line parallel to the line of the lever, and engages with a socket or depression upon the base-plate, instead of engaging with a projection from the

base-plate. The defendants' bolt has a motion and is fastened, as a latch moves and is fastened. The main question is that of infringement; and it is practically conceded by the defendants, that the determination of this question depends upon the proper construction of the plaintiffs' reissued patent. In order to construe the claim it is important to ascertain what was the actual invention of the original patentees.

A horizontally moving bolt, to lock the vibrating lever to the striker plate or hook, and a vertically moving bolt for the same purpose, were old in the art, and are mentioned in the specification of the reissue. In each of these devices, the bolt shot into a socket or depression upon the striker plate. In January, 1868, George Voll, one of the joint patentees, invented a sash lock, in which a horizontally moving bolt was received and was locked in a hole or socket in a "stump" or projection upon the base plate. Application was made by Voll for a patent, on February 25th, 1868, which application was rejected on August 6th, 1868, upon the ground that the invention had been anticipated in the patent of Brockseifer and Sargent, dated May 11th, 1858, one of the patents which are referred to in the plaintiffs' reissue. No appeal was taken. Twelve or eighteen of these locks were manufactured in February, 1868, by Voll, and were sent to the store of George McGregor, Voll's employer. What became of these locks does not appear. Two or three weeks after the rejection, Voll invented another sash-fastener, which consisted of a vertically moving bolt, which engaged with a catch segment or projection upon the base-plate. A completed bolt of this kind was made, and the device was sent to a firm of patent solicitors, who reported that it was unpatentable. Voll and McGregor then united their skill and efforts, and invented the device which is the subject of this controversy, and for which a patent was issued to them jointly, on March 30th, 1869.

The invention of Voll and McGregor was the combination of a horizontally moving bolt and a catch segment upon the base plate. It was not broadly the transfer of a known locking device, and its equivalent, from the striker plate to the base plate. In January, 1868, Voll had transferred a socket from the striker plate to the base plate, and had connected a bolt

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with such socket. The second lock of Voll, viz., the combination of a vertically moving bolt and a projection upon the base plate, was a second stage in the improvement. The invention of Voll and McGregor was the final one of a series of separate inventions, in which series the prior inventions were made by one person before he was joined by his associate inventor. Each invention was distinct, and was separated from its successor by a completed, perfected and operative device. The prior inventions, although they may not have been abandoned by the sole inventor, were not included by the joint inventors in their joint invention. This is not the case of a joint invention which is the result of a progressive series of steps, which were taken by the two minds assisting each other in some degree. Neither is it the case of an invention which was completed by two acting jointly, after a series of experiments, not resulting in a perfected or an operative device, had been made by one of the inventors acting alone. In such a case, a court does not carefully dissect the invention, to ascertain what parts of the whole were furnished by each person. In this case, Voll first invented a means of locking upon the base plate. Whether this invention was patentable or not under the claim in his application, it is not necessary to consider. He next invented another combination, by which the same result was produced. It is agreed that this invention was patentable. The joint inventors thereafter invented a third device, which was the combination of Voll's horizontal bolt and catch segment. This was the only result of the joint labors and inventive skill of the two inventors.

Having thus ascertained the exact extent of the joint invention, the question next arises as to the proper construction to be given to the joint patent. The specification which was attached to the application for a reissue, evidently contained, in the description of the device, the words "socket or depression." By an amendment of the plaintiffs, these words were erased wherever they occurred, and "catch segment" were substituted therefor, before the reissue was granted. The plaintiffs seek to have their claim so construed as to include within the patent a locking device, as well by means of a socket or depression upon the base plate, as by means of a

projection thereon. The invention which was actually made by the joint patentees covers a very narrow ground. It is to be noticed, that the defendants do not attack the validity of the patent, if it is confined to the joint invention. This invention was not broadly the combination of the old ingredients of socket or projection, so arranged as to lock the lever upon the base plate, because, that combination had been made by Voll ; but it was an improvement upon the combination of Voll, and was subsidiary to his second invention. The joint patent, being subsidiary to the prior invention of one of the patentees, should not be extended so as to embrace the original invention. "Where a combination of machinery already exists up to a certain point, and the patentee makes an addition or improvement to the machinery, he must confine his patent to the improvement." *Barrett v. Hall*, 1 Mas., 447, 476. This limitation is sustained by the language of the reissue. If Voll had been the sole inventor and patentee of the joint invention, he might well have contended that his patent should be so construed as to embrace the different forms of locking devices upon the base plate which he invented, if such construction was not inconsistent with the language of his claim, and if he had not abandoned to the public any particular combinations, upon the principle, that "the actual invention of the party is a necessary auxiliary to the construction of the language which he has employed in describing it." Curtis on Patents, sec. 453. But, inasmuch as the joint invention was within a very narrow compass, and the devices which are now claimed to be equivalents had anticipated it, the joint invention should not be made to relate back and include the pre-existing devices, although they were the sole invention of one of the joint patentees. "It is impossible, that any person can be, at the same time, the joint and the sole inventor of the same invention." *Barrett v. Hall*, 1 Mas., 447, 473. It is not intended to suggest any modification of the well understood principle, that the inventor of a combination is entitled to invoke the aid of equivalents (*Seymour v. Osborne*, 11 Wall., 516), but to simply assert, that, where an invention is merely a combination subordinate to pre-existing devices, and has been limited to such sub-combination

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by the language of the claim, the patentee cannot successfully insist that he is entitled to the pre-existing devices, and that this is true when one of the joint inventors of the junior invention is also the inventor of the senior inventions. Under this construction of the plaintiffs' reissue, the defendants do not infringe, inasmuch as they use a vertically moving bolt in combination with a socket upon the base plate.

It is insisted by the plaintiffs that Voll and McGregor are estopped to deny that they were the joint inventors of the patented invention. Neither of the joint inventors have made this denial. They have each denied that they were the joint inventors of the device which their assignees seek to have protected by the reissue, but which the inventors insist was simply an improvement of the sole and unpatented invention of one of them.

The testimony of Voll and McGregor is seriously criticised in connection with their alleged willingness to make oath, for a pecuniary consideration, to the application for a reissue, wherein the joint invention is stated so broadly as to include Voll's sole invention. I have not thought it necessary to pass upon this question of fact, as their present testimony is so corroborated by the exhibits in the case as to remove doubt in regard to the character of the sole and joint inventions.

Let a decree be entered dismissing the bill, with costs.

Charles F. Blake, for the complainants.

Charles E. Mitchell and *Orville H. Platt*, for the defendants.

J. C. FRESE ET AL.

vs.

SHALBERG BIEDENFELD. IN EQUITY.*

In a suit in equity, the proofs taken on the part of the defendant were not filed, because the examiner's fees had not been paid. The plaintiff moved for an order that such proofs be filed, and that an attachment issue against the defendant to compel payment of such fees: *Held*, that the motion must be denied.

(Before WHEELER, J., Southern District of New York, January, 1878.)

WHEELER, J.

This cause has been heard on the motion of the complainant to have the defendant's proofs ordered to be filed, and for an attachment to compel payment of the examiner's fees. Equity rule 82 requires a master to file his report whether his fees are paid or not, and provides for an attachment to compel payment. There is no rule requiring an examiner to file testimony taken by him, without payment of his fees. Doubtless he has a lien as against the party for whom testimony is taken, upon the testimony, for his fees; and, in addition to that remedy, he may proceed by application to the court for an attachment to compel payment. *Caldwell v. Jackson*, 7 Cranch, 276. The other party can have no greater, if as great, right to the testimony. In this case, the other party claims that the testimony shall be put on file, not for the purpose of establishing his case, but that it may be overruled as showing a defence. It is doubtful whether he has any right to the testimony for that purpose, but, if he has, it must be subordinate to the right of the examiner to have his fees first paid. To order the testimony filed without payment to the examiner would cut off one of his remedies, and it may be a very useful one. If the party who has caused the testimony to be taken is willing or prefers to have his cause heard

* 14 Blatchf. C. C. R., 402.

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without it, the opposite party does not seem to have any just cause for complaint. If, however, he deems the testimony of sufficient value to him to be paid for by him, he may be entitled to have it filed on making the payment. But that is not his position on this motion. Here he asks to have it ordered on file without making payment, that it may be overruled as constituting a defence. That he does not appear to be entitled to. Motion denied.

Arthur V. Briesen, for the complainants.

James L. Onderdonk, for the defendant.

RICHARD HOE ET AL.

vs.

THEODORE TUTHILL ET AL. IN EQUITY.

The first claim of reissued letters patent No. 6,326, granted to complainants March 9th, 1875, for an improvement in printers' galleys, namely: "The combination of the edge-rail and its metallic facing or lining by means which secure their union, and leave the metallic facing or lining smooth or free from perforations or similar interruptions, substantially as and for the purpose set forth:" *Held* valid, and to be infringed by the use of an L-angle metal facing for ledges with smooth unperforated face, supported by a wooden rail attached to it by screws through the bed-plate and the bottom part of the L.

(Before WHEELER, J., Southern District of New York, February, 1878.)

WHEELER, J.

This cause has been heard on pleadings, proofs and argument.

The orators own a patent originally issued to Alexander T. De Puy, in letters No. 60,151, dated December 4th, 1866, and reissued to them in letters No. 6,326, dated March 9th, 1875, for an improvement in printers' galleys for holding

type set up in them for use, which they claim the defendants infringe, and they pray appropriate relief for infringement.

Among other defences, the defendants allege that De Puy was not the original and first inventor of the device described in the patent, and that they do not infringe upon the patent. The issue made upon the pleadings and proofs, the decision of which is decisive of the case, is well settled in the concluding paragraph of the defendants' brief to be "Whether Alexander T. Du Pey was the original and first inventor of improvements in printers' galleys, which were and are being made and sold by these defendants."

It appears that such galleys are oblong, of various sizes, with metal bottoms, and with ledges on each side and at one end, high enough to hold upright and in place set-up type. That it is necessary to make them strong, desirable to have them light, and essential to their convenient use that the inner surfaces of the ledges next to the type be smooth.

The earliest style shown was made with wooden ledges having metal facings, with screws or nails through the facings extending into the wood. This afforded lightness and strength, but the nail or screw heads and their sockets made the faces of the ledges rough and troublesome.

The next style was a ledge of metal without wood. This obviated the roughness, but made them heavy. In 1859 De Puy invented the style, described in his patent, of galleys with wooden ledges faced with metal, secured by fastenings back of, and not interfering with, the smooth faces of the ledges. This afforded permanently smooth faces to the ledges combined with lightness and strength as far as has been shown to be practicable. This is the first, so far as has been made to appear, that any one has accomplished these combined results. In the specification of the patent he described the mode of applying his invention and its advantages, and in doing so he stated: "It is obvious that this invention may be embodied in various forms without departing from the gist or spirit of it." Then he described a particular method of fastening the metal face of the ledges to the wood by extending the metal back at the top and bottom, and turning flanges on the extensions to be forced into corre-

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sponding grooves in the wooden rail ; and added : " The ledges may be attached to the bed-plate in any well-known manner."

The first claim in the patent is for : " The combination of the edge-rail and its metallic facing or lining by means which secure their union and leave the metallic facing or lining smooth or free from perforations or similar interruptions, substantially as and for the purpose set forth."

The defendants use an L-angle metal facing for ledges, with smooth unperforated face, supported by a wooden rail attached to it by screws through the bed-plate and the bottom part of the L. This is a mode of fastening the metal face to the wooden rail different in form from that which De Puy specifically described in his patent, but his leading idea, as set forth in the patent, of fastening the face-plate to the rail by an attachment back of the plate without perforating the face, is followed. The screws through the L into the wood take the place of the lower flange, and the upper one is dispensed with. The screws were well-known substitutes for flanges in such fastenings, and that change was one of form and not of substance.

According to the rules of law relating to this subject, De Puy was the original and first inventor of the invention described in the patent, and of the device made use of by the defendants, and the question stated as being decisive of the case must be answered in the affirmative. This makes it unnecessary to make any decision upon the questions made by the orator's counsel with reference to evidence bearing upon the question.

Let a decree be entered for a reference and accounting, and an injunction, according to the prayer of the bill.

Munson & Philipp, for the complainants.

Daily & Perry, for the defendants.

JOHN O. MERRIAM ET AL.

vs.

ABRAHAM R. VAN NEST ET AL. IN EQUITY.

The complainant's patent, for a combination, with whip sockets, of the particular means described for attaching them to carriages—the device used being a clamp, one arm of which is formed of projections on the side of the socket, and the other of a lever of the third order, both curved to fit the dash-rail of a carriage, and so constructed that it will fasten to the rail without reaching round it, and is worked by a screw and nut ; is not infringed by the use of a socket, with a clamp extending around the rail made up of projections from the socket, a bar to go behind the dash-rail, and two screws with nuts, one on each side of the rail.

It is not infringed by the use of a socket with a clamp extending around the rail, made up of projections from the socket, a bar to go behind the rail, and a bar hinged to a projection at one side of the rail.

(Before WHEELER, J., Southern District of New York, February, 1878.)

WHEELER, J.

This cause has been heard on pleadings, proofs and argument. The plaintiffs own reissued patent, No. 5,713, dated December 30th, 1873, which they allege the defendants infringe. The defendants, among other defences, deny any infringement.

The invention is of an attachment to whip-sockets for fastening them to carriages. Not of whip-sockets, nor of the attachment of them to carriages, for those things were long before known, but of the combination, with whip-sockets, of the particular means described for attaching them to carriages. This is all that is claimed of the patent, and all the patent the invention would bear.

The device used is a clamp, one arm of which is formed of projections on the side of the socket, and the other of a lever of the third order, both curved to fit the dash-rail of a carriage ; and it will fasten to the rail without reaching round it, and is worked by a screw and nut.

Merriam v. Van Nest.

The defendants have sockets, with two different attachments, for fastening them to carriages. Each consists of a clamp, and so far in name their methods are like the plaintiffs'. But each of their clamps is quite different from the plaintiffs'. One is made up of projections from the socket, a bar to go behind the dash-rail, and two screws, with nuts, one each side of the rail. The other, of like projections and bar to go behind the rail, with the bar hinged to a projection at one side of the rail, and worked by a nut and screw at the other side of the rail. Both extend around the rail.

If the patent had been for the result of attaching a whip-socket to a carriage by the means described, it might be said that the defendants accomplished a result of which the plaintiffs had a monopoly by means mechanically equivalent to the plaintiffs, and that they thereby infringed. But here the whole field of attaching sockets to carriages was left open, except as to the use of the means described, and the monopoly of the use of those could not be infringed by the use of others not the same.

From the comparison of the two methods of the defendants with those of the plaintiffs, they do not appear to be the same. They may be equivalents in accomplishing a result, but not in methods of accomplishing it, so there does not appear to be any infringement.

This result makes the consideration of the other defences set up wholly unnecessary for the purposes of the suit. Let a decree be entered dismissing the bill of complaint, with costs.

Josiah P. Fitch, for the complainants.

Charles J. Hunt, for the defendants.

HORATIO H. ABBE ET AL., COPARTNERS UNDER THE NAME
OF THE GONG BELL MANUFACTURING COMPANY,

vs.

JONATHAN C. CLARK ET AL. IN EQUITY.

The reissued patent granted to complainants, as assignees of Elijah C. Barton, September 14th, 1875, for chime toys, *held* valid.

The purposes and scope of reissues considered.

(Before SHIPMAN, J., District of Connecticut, February, 1878.)

SHIPMAN, J.

This a bill in equity to restrain the defendants from the alleged infringement of reissued letters patent which were granted to the plaintiffs, as assignees of Elijah C. Barton, on September 14th, 1875. The original patent was dated May 19th, 1874.

The invention is a child's toy, and as shown in the drawings attached to the patent, is a pair of wheels connected by an axle, in combination with two open-mouthed or gong-shaped bells mounted upon the axle and between the wheels, so as to revolve therewith, and to be caused to ring whenever the wheels are rotated. A tongue or draft-bar is also connected with the wheels, so as to allow the wheels and bells to be rotated independently of the draft-bar. The three claims of the reissue are: "1. The combination with the connected wheels A A, of one or more bells, arranged between, and connected to, said wheels, so as to revolve simultaneously therewith, and to ring when so revolving. 2. The combination of the loosely-connected tongue or draft-bar P with the wheels A A, and intermediately arranged revolving bell or bells. 3. The combination of the following elements: The wheels A A, a pair of open-mouthed or gong-shaped bells, C C, provided with striking mechanism, and an axle or cross-rod, B, connecting the said wheels."

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The defendants manufacture and sell two toys. The first consists of a pair of wheels connected with each other by a drum or large hollow axle. Sleigh-bells are attached to the inside of the drum or axle, between the wheels, by elastic or rigid connections, which bells revolve simultaneously with the wheels, and ring when revolving. The second toy consists of a pair of wheels connected with each other by bent metallic rims or axles, and attached to one wheel, and encircled by the rims, is a sleigh-bell, which revolves with the wheels, and rings as it revolves. In each device a bell is so connected with the axle and wheels as to allow the wheels to revolve independently of the bell.

The defendants deny the novelty of the patented invention, and also deny infringement.

The record shows that prior to the date of plaintiffs' original patent, the following inventions were known in the art : First, the toy of Joseph Deuell, invented in 1865, and patented May 26th, 1874, which consists of a ring made of a piece or pieces of leather, or some similar material, with one or more bells attached to the inner periphery of the ring. Second, the Crawford and Hervey patent, dated November 19th, 1867; the Charles C. Johnson patent of March 23d, 1869; the English patent of William Robert Blake, filed April 20th, 1869; and the Rivera Ward patent of December 27th, 1870. All these devices are children's trundling-hoops, to which are attached in various ways, either upon the inside of the hoops or upon the spokes, bells, which ring as the hoop is trundled. Third, the George W. Brown patent of June 25th, 1872, which consists of a pair of connected wheels of different diameters. It has a bell which rings by the jolting of the vehicle, but has no bell connected with the wheels so as to revolve simultaneously therewith. Fourth, the bell of William H. Nichols, patented August 27th, 1872, which is a call bell composed of two open-mouthed gong-bells which revolve upon a fixed horizontal shaft.

No one of these articles has the characteristic features of the plaintiffs' device, but are widely removed from their toy. The evidence in regard to the pre-existing devices shows that Barton's invention consisted in the combination of two con-

nected wheels, with a bell or bells arranged between, and upon the axle of the wheels, which bells are connected with the wheels so as to revolve therewith, and to ring when revolving, the arrangement of wheels and bells being substantially as described. The load of bells is put between the connected wheels, and the bells revolve with the revolving wheels. He had apparently no predecessor in this combination.

It cannot be earnestly denied that the defendants' toys infringe the terms of the first and second claims of the reissue, if the plaintiffs are entitled to the described combination of connected wheels with a bell or bells of any shape. But it is insisted that in the original patent the invention was limited to gong-shaped bells, and that the first and second claims of the reissue are void unless the bell or bells which are therein mentioned are also thus limited. It is true that the plaintiffs' original specification and drawings describe gong-bells, and that the claim of the original patent was for a combination of wheels with a pair of open-mouthed or gong-shaped bells, etc. There is no difference between the drawings of the patents, and no substantial difference in the descriptive portion of the two specifications.

The purpose of a surrender and reissue is not to introduce new features, ingredients or devices, but to render effectual the actual invention for which the original patent should have been granted (*Collar Company v. Van Dusen*, 23 Wall., 530); but the actual invention is to be shown, suggested, or substantially indicated in the original specification, drawings or models, and the scope or effect of the invention is not to be enlarged so as to include what was not so shown, suggested or indicated. An inspection of the drawings and specification in this case clearly suggests that the shape of the bells was not an essential feature of the invention, but that their shape or form could be greatly modified, while the essential characteristics of the invention were unaltered. A moderate degree of mechanical skill could substitute a sleigh-bell or an ordinary open-mouthed bell for a gong-bell. The actual invention was indicated by the device as shown in the patent; but it was so claimed that any one might take advantage of and have the benefit of the original thought by a substitution of

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one form of bell for another. In order to protect inventors who have taken patents which are inoperative by reason of such inadvertence, the statute has provided for a surrender and reissue. The strong tendency of recent decisions has properly been to restrict the reissue to the precise thing which the patentee invented, and which he had shown or had indicated in the specification or drawings, and not permit patentees to expand their claims and take in whatever improvements subsequent inventors have made. But in this case the invention manifestly had a wider scope than was claimed in the original patent.

It follows that the first and second claims have been infringed.

Let a decree be entered for an injunction, and an account.

J. C. Clayton, for the complainants.

W. E. Simonds, for the defendants.

GEORGE DRAPER

vs.

THE POTOMSKA MILLS CORPORATION. IN EQUITY.

An imperfect and incomplete invention, resting in mere theory, or in intellectual notion, or in uncertain experiments, and not actually reduced to practice and embodied in some distinct machinery, apparatus, manufacture or composition of matter, is not patentable.

Illustrated drawings of conceived ideas do not constitute an invention, and unless they are followed up by a reasonable observance of the requirements of the patent laws, they can have no effect upon a subsequently granted patent to another.

A patentee whose patent is assailed upon the ground of want of novelty, may show by sketches and drawings the date of his inceptive invention, and, if he has exercised reasonable diligence in perfecting and adapting it, and in applying for his patent, its protection will be carried back to such date.

(Before SHEPLEY, J., District of Massachusetts, February, 1878.)

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SHEPLEY, J.

This case has been argued at great length and with great ability, upon a record of over eleven hundred pages of testimony. I will state as briefly as possible the conclusions to which the court has arrived, after a careful consideration of the evidence, and the elaborate arguments of counsel.

First, that the invention by Draper of a combined spindle and bobbin, the spindle consisting of a shaft having a sleeve attached to it which extends down over the tubular and elevated bolster, and below the bolster, to carry the whirl between the bolster and the step, and fitted for a bobbin to extend below the top of the bolster, the bobbin having a bearing above the bolster, and another below the bolster upon the sleeve, as described in his patent, reissue No. 6,016, dated August 18th, 1874, was novel, useful and patentable.

Second, that the said Draper is entitled, upon the evidence in this record, to date his invention as having been substantially made by him as early as May 13th, 1871, and fully perfected and embodied in an operative spindle and bobbin prior to January 19th, 1872.

An imperfect and incomplete invention, resting in mere theory, or in intellectual notion, or in uncertain experiments, and not actually reduced to practice and embodied in some distinct machinery, apparatus, manufacture, or composition of matter, is not, and indeed cannot be, patentable under our patent acts, since it is impossible, under such circumstances, to comply with the fundamental requisites of those acts. *Reed v. Cutler*, 1 Story, 590. Illustrated drawings of conceived ideas do not constitute an invention, and unless they are followed up by a seasonable observance of the requirements of the patent laws, they can have no effect upon a subsequently granted patent to another. But a patentee whose patent is assailed upon the ground of want of novelty, may show by sketches and drawings the date of his inceptive invention, and, if he has exercised reasonable diligence in perfecting and adapting it, and in applying for his patent, its protection will be carried back to such date. *Reeves v. The Keystone Bridge Company*, 1 Off. Gaz., 466. The drawings made by Draper, and exhibited to Sawyer, May 13th, 1871,

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exhibit a matured and perfected invention in the mind of the inventor, requiring only an embodiment in an operative spindle and bobbin to entitle him to a patent. As there was no unreasonable delay or want of diligence in perfecting and adapting the invention and applying for a patent, I see no reason, upon the evidence in this record, why the protection of his patent should not be carried back to that date. I therefore find, third; that Draper was the original and first inventor of what is claimed by him in the reissued patent aforesaid, and was not anticipated by any of the persons whose prior knowledge and use are alleged as matter of defence in the answer of respondents.

Upon a comparison of the reissued with the original patent, no new invention is found to be described or claimed in the reissue, or anything which is not clearly indicated and claimed as invention in the original. The "new matter" relied upon by defendants proves to be only new words or phrases more aptly describing the old invention. The same construction and combination of spindle and bobbin are claimed in the reissue as in the original. The fourth conclusion, therefore, is that the reissued patent is valid.

Fifth, the respondents, by constructing and combining their spindle and bobbin, as proved, so that the spindle, bolster and sleeve will permit a quill-bobbin of ordinary size to come down and so encompass the same as to take one bearing upon the sleeve below the top of the bolster, and another upon the spindle above the sleeve or bolster, the sleeve carrying the whirl between the bolster and the step, have infringed the first, third, fourth and sixth claims of the reissued patent.

Decree for injunction and account as prayed for in complainant's bill.

Chauncey Smith and A. K. P. Joy, for the complainant.

Benjamin F. Thurston and D. Hall Rice, for the defendants.

HUGH W. COLLENDER

vs.

AMASA W. BAILEY. IN EQUITY.

Reissued Letters Patent No. 2,511, granted to Hugh W. Collender, March 19th, 1867, for an "improvement in cushions for billiard-tables," *held to be for the process or art of making the cushion, as described, and not for the cushion as an article of manufacture.*

(Before SHEPLEY, J., District of Massachusetts, February, 1878.)

SHEPLEY, J.

Reissued Patent No. 2,511, to Hugh W. Collender, dated March 19th, 1867, is for an improvement in cushions for billiard-tables. One of the questions presented in this case is, whether the patent is for an improvement in the mode of making the cushion or for the improved cushion thus made—in other words, whether the patent is for a "new manufacture," or a "new art" or process. The words of the claim clearly apply to a new art or process of making the cushion. The claim is as follows: "I do not claim in this application the use of two rubbers of different densities, as this is covered by a former patent of mine; nor do I claim a steel strip, a whalebone strip, or any other substances which are used with a view of producing a cushion which has an elastic foundation and a comparatively solid face; but what I claim as my invention, and desire to secure by letters patent, is: Uniting the parts employed in forming combination billiard-cushions by placing the harder or more dense and less elastic substances in a mold, and allowing the melted rubber to flow against, around, or into the harder or more dense and less elastic substances, or causing the plastic rubber, by pressure, to unite with the same, and then vulcanizing the india-rubber, substantially as and for the purpose set forth."

In the case of *Collender v. Came*, decided by Mr. Justice Clif-

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ford, in this circuit, at the May term, 1876, it did not become necessary for the court to decide whether the reissued patent of the complainant was for an art or a manufacture, as the defendant in that case used the Collender process and made the Collender product. In this case it becomes necessary to decide that question, for only eight of the cushions proved to have been made by the defendant were made by the process described by Collender, while others made by a different process are claimed by complainant to be the equivalents of his product. In this case the patent is construed to be for the *art* of : "Uniting the parts employed in forming combination billiard-cushions, by placing the harder or more dense and less elastic substances in a mold, and allowing the melted rubber to flow against, around, or into the harder or more dense and less elastic substances, or causing the plastic rubber, by pressure, to unite with the same, and then vulcanizing the india-rubber, substantially as and for the purpose set forth." Under this construction of the patent, defendant is only liable for infringement, by reason of making eight sets of cushions by the Collender process.

The decree will be for the complainant for an injunction against the use of the Collender process, and for the profits from the use of the eight sets of cushions, and for one-half of complainant's costs.

James E. Maynadier, for the complainant.

Henry D. Hyde, for the defendant.

Sayles v. Dubuque and Sioux City Railroad Co.

THOMAS SAYLES

vs.

THE DUBUQUE AND SIOUX CITY RAILROAD COMPANY.
IN EQUITY.

Although the original and extended term of the letters patent had expired before suit brought, yet the bill, being for a discovery and account, can be maintained.

The defendant's profits being in the nature of trust moneys held by defendant for complainant's use, require an investigation which a court of law is not so competent to make as a court of equity.

The right of the complainant to recover profits realized from the use of complainant's original patent, held barred by section 55 of the Act of 1870. (16 U. S. Stat. at Large, 206.)

(Before DILLON and LOVE, JJ., District of Iowa, February, 1878.)

Letters patent were issued July 6th, 1852, to Henry Tanner, for an improvement in railroad car brakes, and were extended July 5th, 1866. The extended term expired July 6th, 1873. The plaintiff is Tanner's assignee. On February 5th, 1877, he filed his bill in equity, stating that the defendant had used the invention and derived large profits therefrom, and praying a discovery and an account, etc.

The defendant filed a general and special demurrer to the bill.

DILLON and LOVE, JJ.

We have considered the points made in argument upon the demurrer to the bill. We have no time to elaborate our views. It must suffice to state our conclusions. We do this at this time so that the cause may proceed. These conclusions are not, on all the points, so fixed as to preclude further argument and consideration on the final hearing. The views which we now entertain of the questions made are as follows :

First, As to the jurisdiction of equity over the bill.

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Although the original and extended term of the letters patent had expired before this suit was brought, we think the bill can be maintained in equity on the ground that it seeks a discovery and accounting for profits, made by the defendant's use of the plaintiff's property ; which profits, if not trust moneys strictly, are of that nature, and necessarily require an investigation, which a court of law is not so competent to make as a court of equity

Second. As to the effect of the assignment to Tanner of April 1st, 1852.

By an amendment to the bill of complaint it appears that on the same 1st day of April, 1852, Tanner executed an instrument to the inventors Thompson and Bachelder by which the latter were to participate in the gains and benefits which should accrue to Tanner by reason of their assignment to him. Under the bill as amended we are of opinion that the said assignment of April 1st, 1852, by the inventors to Tanner, was intended to give to the latter the whole benefit of the invention, including the original term and any extended term.

Third. As to the extension of the patent on the 5th day of July, 1866.

Assuming that Tanner executed a cotemporaneous agreement such as is alleged in the amendment to the bill : The administrator of one of the inventors, and the other in person, having petitioned for the extension of the said patent, we are of opinion that it was within the competency of the Commissioner of Patents to grant such extension, since it was made at the instance of the inventors, and would inure to their benefit. Under these circumstances, although the legal title in the extension might be in the patentee, Tanner, the inventors would have a clear equitable interest in it, thus satisfying the policy of the law in encouragement and reward of inventors.

Fourth. As to the statutes of limitation.

We are inclined to the opinion that the State statute of limitation has no application to suits in respect of the rights granted by letters patent for inventions, but we leave the question open to further discussion. This bill was brought in February, 1877. The original term expired July 6th, 1866,

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the extended term, July 6, 1873. The Acts of Congress of 1870, section 55, prescribed, that "all actions shall be brought during the term for which the letters patent shall be granted or extended, or within six years after the expiration thereof." This limitation continued in force until the first day of December, 1873,* when the "Revised Statutes" took effect repealing it.

Since the original and extended term of a patent may be and often is held by different persons, and since the language of the limitation statute of 1870 is ambiguous; in view of the injustice to defendants, of requiring them to account for profits made any time since the date of the original patent in 1852, a period of twenty-five years, when the proofs may be lost. We are of opinion that their right is barred to recover for profits or damages during the original term. An inquiry of profits or gains within a period of five years is difficult, as the profits gained depend upon many conditions. When we come to carry such an investigation back for almost a quarter of a century, accuracy of results is almost impossible, and the laches of a patentee coming forward at such a late date does not give him a very favorable position in a court of equity. What is the proper rule to measure compensation in a court of equity is a question not arising on the demurrer, and is not implied from the above use of the words "profits and gains."

Fifth. As to the liability of the present company to account for profits made by the prior company.

On its face the bill shows no liability of the present company for the profits gained by the former company. This liability is based upon an allegation of *merger*; what is meant by that in a legal sense as applied to these two corporations, we do not know or understand. If any facts exist, which make the present company liable for the acts of the former company in respect of this patent, such facts ought to be stated in the bill.

The amendment to the bill in this regard shows no liability on the part of the present company for the use of the patent

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by the prior company. The plaintiff has not established his debt or claim against that company by a judgment. That company is not a defendant here. No facts are stated showing that the property of the prior company which was acquired by the defendant company was taken with a trust fastened on it to pay the debts of the prior company.

An entry will be made on the demurrer in conformity with these views.

Albert H. Walker, for the complainant.

Geo. Payson, for the defendants.

GEORGE A. S. WHITING

vs.

JOHN A. S. GRAVES ET AL. IN EQUITY.

An employment to invent and perfect machinery for a particular purpose, while it will operate as a license to the employer to use machines invented by the employee, and put in use under such employment, will not, of itself, confer upon the employer any legal title to the invention itself or to the letters patent protecting it.

Where the inventor assigns his inventions to a party to whom the patent is subsequently issued as the assignee of the inventor, upon a verbal agreement that the assignee shall pay the expense of the patents for one-half interest in it, the manufacture and sale of the patented articles by the defendants, to whom the patentee has assigned his equitable interest in the patents, is not infringement.

The inventor had an equitable title to one-half of the patents.

In a Court of Equity a party holding an equitable title cannot be ousted of his equitable rights by the holder of the legal title, who in such case stands in a Court of Equity as trustee for the use of the party beneficially interested.

(Before SHEPLEY, J., District of Massachusetts, February, 1878.)

SHEPLEY, J.

The complainant, being about to start a factory for the manufacture of fancy dry goods, employed Elijah L. Howard as a

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machinist, at a salary of twenty-one dollars a week. The complainant states the employment as follows : " I also engaged a machinist, whose duties were the making and keeping in order of ruffling, ruching, and fluting machines, and all attachments or machinery required for the manufacturing of any goods which might be necessary to be made." Complainant, however, on being interrogated as to what information he communicated to Howard, as to the duties and services expected of him, replies : " I told him that I should require him to make what machinery was necessary, and keep it in repair."

Howard testifies that complainant, being about to start a rival factory for the manufacture of ruffings, in which sewing-machines were to be used, wanted a man to take charge of his machinery ; that Howard was introduced to him by one Leavitt as a competent man for that service ; that Whiting agreed to employ him. He testifies : " He was to pay me twenty-one dollars a week ; that was all the agreement made."

It is apparent from the complainant's statements, as well as from the testimony of Howard, that there was nothing in the original contract for service which would give Whiting any legal or equitable title to any letters patent for any inventions Howard might make. During the term of his employment, patents for a number of inventions made by Howard were issued to Whiting, his employer, to whom the right in the inventions had been assigned by Howard, at or before the times of making the applications. Many of these were for such little additions to sewing and other machines as were necessary to adapt them to the making of flutings, ruffles and ruchings. As these were adaptations of machinery to the special business of Whiting, and the expenses of the applications and the patent fees were paid by him, it seems to have been considered by both parties that Whiting had the sole interest in the patents. Two patents, however, were issued in the name of Whiting for the inventions of Howard, for contrivances applicable to sewing-machines generally, being for improved mechanisms for operating such machines. It is claimed on the part of the complainant that he is the sole owner of these letters patent, and that Howard has no legal

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or equitable interest therein. The defendants claim that Howard, the inventor, is entitled to an equitable interest in one-half of the rights under these two patents.

Whiting contends, and in substance testifies, that Howard went to Whiting with an understanding that he should make improvements in the machinery of Whiting's factory to the best of his ability, and Whiting should have the fullest benefit of them ; and the patents upon these inventions were procured merely for business protection by Whiting, and the manufacture for sale of the machines was an afterthought. Even if this were so, there would seem to be no good reason why Howard should not receive some benefit from the use of his inventions in other factories than Whiting's, and from the sale of his inventions to others. It was no part of the original employment of Howard, according to Whiting's statement of his understanding of it, to invent machinery for general use, but only in the factory of Whiting. This was a factory not for making and selling machinery, but for manufacturing fancy dry goods with the aid of machinery. The employment to invent and perfect machinery for that purpose, while it would operate as a license to Whiting to use machines invented by Howard, and put in use under such employment, would not, of itself, confer upon Whiting any legal title to the invention itself, or to letters patent protecting it. Whiting states in his testimony that he had no thought of patenting any inventions at the time of the employment of Howard, and that the patent business never occurred to his mind at that interview. Yet, it is contended that when the applications were made for the patents on the treadles, Howard assigned the inventions to Whiting without any consideration other than what would arise from the nature of the employment, and that the legal and equitable title to the letters patent is so absolute in Whiting that he is entitled to treat Howard and the defendants who are using the treadles under Howard, as infringers. Whiting states that subsequently to the time when the patents for the two treadles were issued, he agreed to give Howard one-half of the profits from the manufacture and sale of the Howard treadles as long as Howard remained in his employment. It appears that a separate account was

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opened on Whiting's books under the head of the "Howard Treadle Account."

Howard, on the contrary, testifies that Whiting said he would pay the expense of the patent on the first treadle for one-half interest in it ; that he subsequently told him he had the papers made in his own name, assigned to himself, and that at any time Howard wanted a transfer of his interest in those papers, he would do so ; and that when he proposed to have the second treadle invention patented, he said he would make the same terms as on the first patent ; that he (Howard) assented to that, and the papers were made accordingly.

Three witnesses, Graves, Weston and Kenerson, all testify to conversations at different times with Whiting, in which he stated to them, respectively, that he was to pay the expenses of obtaining the patents for one-half interest in them, and was to assign one-half to Howard whenever he wanted it. This seems to fully confirm Howard's statement of the transaction, and Whiting's version of the arrangement is uncorroborated by any witness, and is not consistent with the attendant facts and circumstances proved in the case. After Howard left the employment of Whiting, he assigned his equitable interest in these two patents to the defendant Graves. Under this assignment the defendants, Graves and Abercrombie, his partner, have made and used the patented treadles. As it is clear upon the evidence in this record that Howard had an equitable title to one-half these two patents, the defendants cannot be held to infringe. In a court of equity a party holding an equitable title cannot be ousted of his equitable rights by the holder of the legal title, who in such a case stands in a court of equity as trustee for the use of the party beneficially interested. *Continental W. Co. v. Empire W. Co.*, 8 Blatchf. C. C. R., 295 ; *Clum v. Brewer*, 2 Curtis, 506 ; *Woodworth v. Cook*, 2 Blatchf. C. C. R., 151 ; *Price v. Dyer*, 17 Ves., 357 ; 1. Story Eq. Jur., § 161.

The defendants' plea is sustained, and the bill dismissed with costs, and decree will be entered accordingly.

Thomas William Clarke, for the complainant.

George D. Moyes, for the defendants.

Konold v. Klein.

CHRISTIAN KONOLD ET AL.

v's.

FREDERICK KLEIN ET AL. IN EQUITY.

The grant of a patent is an adjudication, that every fact, which must necessarily appear to entitle the patentee to it, has been established by sufficient proof.

As a patent can only be granted upon the conditions prescribed by the statute, the grant of it necessarily involves a finding, by the officer who allows it, of the existence of such conditions, and is, therefore, sufficient primary evidence of everything necessary to support the patentee's title.

The exhibition of a patent sufficiently establishes the priority of invention by the patentee of the invention described in it. This evidence is, however, only presumptive, and its truth may be contested; but the presumption stands until it is overthrown by satisfactory counterproof, and the burden of disproof is upon the contestant. Where the proofs, as to the date of making an invention alleged to anticipate that of the complainants, are left in a doubtful condition, the court cannot determine that the presumptive title of the patentee to the invention is overthrown.

(Before McKENNAN, J., Western District of Pennsylvania, February, 1878.)

McKENNAN, J.

The grant of a patent is an adjudication, that every fact, which must necessarily appear to entitle the patentee to it, has been established by sufficient proof. Thus, as the statute authorizes the allowance of a patent only for a subject which is patentable, is new and useful, and of which the applicant for it is an original and first inventor, so the grant of it necessarily involves a finding, by the officer who allows it, of the existence of these conditions, and is, therefore, sufficient primary evidence of everything necessary to support the patentee's title. Hence it is that the exhibition of a patent sufficiently establishes the priority of invention by the patentee of the invention described in it. This evidence is, however,

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only presumptive, and its truth may be contested, but the presumption stands until it is overthrown by satisfactory counter-proof, and so the burden of disproof is upon the contestant.

This is the posture of the parties to this controversy. The complainants are the owners of a patent granted on the 3d of September, 1867, to Christian Konold, for an improved die for swaging mattocks, hoes, etc. Konold is, therefore, presumably, the first inventor of the die described in it.

While the respondents do not controvert the use, by them, of dies substantially the same as this one, they contest the patentee's priority, averring that John C. Klein, one of the defendants, constructed and used, in the year 1864, two dies of a similar form, and adapted to a like use. Upon them devolves the task of proving this, and, if they have failed to do it, by evidence of satisfactory force and clearness, they have failed to impair the presumption in which the complainants are intrenched.

There is no doubt that dies like the patented device were made by John C. Klein, but when were they made? That is the decisive, and indeed, the only question in the case. If the evidence produced by the respondents is accepted as true, it fully establishes the fact that these dies were made in April, and in May or June, 1864, three years before the date of the Konold patent. But it is confronted by opposing evidence from the books of the firm by whom the dies were confessedly made, and by the foreman who superintended the casting of them, touching the dates of the manufacture of dies for Klein, which must at least impair confidence in the accuracy of the dates testified to by respondents' witnesses, and preclude an absolute acceptance of their statements.

In the doubtful condition of the proofs, I cannot determine that the presumptive title of the patentee, to the invention claimed, is overthrown, and there must, therefore, be a decree for complainants for an injunction and an account.

George Shiras, Jr., for the complainants.

M. W. Acheson and C. W. Robb, for the defendants.

Snow v. Tapley.

GEORGE K. SNOW

vs.

GEORGE W. TAPLEY. IN EQUITY.

The invention claimed in letters patent issued to George K. SNOW, December 17th, 1872, numbered 134,105. for machine for uniting paper and cloth: *Held*, not invalid for want of novelty.

(Before SHEPLEY, J., District of Massachusetts, February, 1878.)

SHEPLEY, J.

In this case, upon a review of the evidence, I find :

First. That the letters patent issued to complainant, December 17th, 1872, numbered 134,105, are not void by reason of any anticipation of the invention therein described by the description in the English letters patent to Eugene Carless, or by any use proved in the case of the Carless machine.

Second. That the Gibson machine, set up in the answer of the defendant, was not an abandoned experiment or an abandoned machine, the disuse of the machine for a time, proved in the case, being satisfactorily accounted for by proof of circumstances connected with demand and supply of the product and independent of the efficiency of the mechanism, and, therefore, that the use of the Gibson machine was, and is, open to the defendant.

Third. That a material and essential step in the process of continuously uniting paper and cloth taken from separate rolls or packages, described in the patent of the complainant and in the first claim of the letters patent issued to him, is the process of applying paste or other adhesive material to the cloth alone, by passing the cloth through or past the paste in the manner and by the instrumentalities described in the specifications and drawings of said patent.

Fourth. I do not find in any contrivance proved to exist prior to Snow's invention, or in any process proved to have been

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practised prior to the invention of his process or art, any anticipation of Snow's process as a whole, treating his mode of applying the paste to the cloth, as I have in the third clause, as an essential element in his process.

Fifth. I allow the defendant to amend his answer (motion for leave so to do having been made before final argument), to allege that the patentee has forfeited his right to a patent, by allowing the invention to be in public use and on sale in this country for more than two years before the application for the patent was made.

Sixth. An interlocutory decree will be drawn up and submitted to the court in accordance with these findings; the case, after the amended answer is filed, will be opened for the taking of testimony by either party for the space of sixty days thereafter, on the issue solely of prior public use and sale, and no other issue; such amended answer to be filed within ten days.

Chauncey Smith, and Benjamin F. Thurston, for the complainant.

Charles F. Blake, Edmund Wetmore and William A. Jenner, for the defendant.

HIRAM W. BROOKS

vs.

JOHN MOORHOUSE. IN EQUITY.

The complainant had previously brought an action at law against the defendant for damages for the infringement of a patent. The defendant's default was entered, and an arrangement was made that the complainant should buy the stock of infringing articles which the defendant had on hand, and that the defendant should thereupon stop the further manufacture of them. The arrangement was carried out, but the defendant afterwards made and sold articles differing very slightly in form from

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those previously made by him, and clearly embodying the complainant's invention. Thereupon this suit in equity was brought for an injunction and account: *Held*, that the defendant was estopped by his previous agreement from contesting the validity of complainant's patent.

A Court of Equity will not ordinarily entertain jurisdiction of a matter which the person has had an opportunity of litigating in another court, and which had there been decided against him, unless it appears that circumstances beyond his control prevented his making the defence, or trying the question.

(Before SHEPLEY, J., District of Massachusetts, February, 1878.)

SHEPLEY, J.

An action at law was commenced in this court by this complainant against this defendant, alleging infringement of the same patent now in suit in this case in equity for an injunction and account. The defendant was personally served with process in that suit, and allowed a default to be entered on the 10th day of November, 1874. After the commencement of the action, an arrangement was made between the plaintiff and the defendant, that if plaintiff would buy the stock of boot and shoe buttoners the defendant had on hand, defendant would stop the manufacture of the infringing articles. Accordingly defendant gave to the plaintiff a receipted bill for manufactured goods and for wires and handles for the manufacture, amounting to \$157.90, which goods plaintiff received and paid for at the agreed price. Across the face of the receipted bill, Moorhouse, the defendant, wrote, "I agree not to make any more of the Goldthwait buttoner from this date of our Lord, October 6th, 1874," and signed it with his name. He afterward continued to manufacture and sell buttoners differing very slightly in form from those previously made by him, but clearly embodying the invention described in the Goldthwait patent, of which complainant is the assignee. When the bill in equity in this case was filed, final judgment had not been entered in the action at law, no assessment of damages having been made.

The defendant's answer denies that Goldthwait was the first and original inventor, and alleges that prior to the date of the alleged invention great numbers of buttoners embodying the invention described and claimed by Goldthwait

had been imported from England and France, and were in common use and on public sale in this country more than two years. Defendant in reply to the allegations in the bill in relation to the action admits the commencement of the action, and the voluntary default, but avers that when the action was brought the defendant was ignorant of the facts he now sets up in relation to the prior manufacture, use and sale of the buttoners before Goldthwait's invention, and was ignorant of the law and not advised that those facts would constitute a defence. The averment in the answer of ignorance of the facts does not correspond with defendant's testimony in the case, from which it would appear that before the default he ascertained that the article had been imported many years, and that the patentee had stolen the patent from a French patent by simply reversing.

Defendant now relies for his defence upon the evidence tending to show an importation from France and Germany, and the public sale and common use in this country more than two years before the application for the patent, of articles embodying the invention. The complainant, while contending that the evidence is not sufficient to establish prior invention and use, contends that it is not open to the defendant, after the default in the action at law, to interpose that defence in this proceeding in equity, and also that the defendant cannot in a court of equity deny the binding obligation upon him of the agreement.

The agreement not to make any more of the Goldthwait buttoners was founded upon a valuable consideration. It was a part of the arrangement between the parties for the purchase of the stock and materials Moorhouse had on hand. Such an agreement made with full knowledge of the facts, and not under duress, and with no evidence that it was unconscientious or unreasonable, a court of equity will enforce. In *Sargent v. Larned*, 2 Curtis, C. C., 340, where the facts are very similar to the facts in this case, this court, Mr. Justice Curtis presiding, refused to allow such an agreement to be repudiated, and enforced its observance by injunction.

Nor will a court of equity ordinarily entertain jurisdiction

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of a matter which the person has had an opportunity of litigating in another court, and which had there been decided against him, unless it appears that circumstances beyond his control prevented his making the defence, or trying the question. *Le Guen v. Gouverneur et al.*, 1 Johns. Cas., 436; *Williams v. Lee*, 3 Atk., 224; *Ramsden v. Jackson*, 1 Atk., 293; *Marrriot v. Hampton*, 7 Term Rep., 269; *Baker v. Whiting*, 1 Story, 218.

The defendant, both by the proceedings in the action at law and the agreement signed by him, is concluded from contesting the validity of the patent.

Decree for injunction and account according to the prayer in the bill.

Charles T. Russell and *Charles T. Russell, Jr.*, for the complainant.

Ambrose Eastman, for the defendant.

WILLIAM W. BROWN ET AL.

vs.

THE RUBBER-STEP MANUFACTURING COMPANY ET AL. IN
EQUITY.

The patent granted to Edwin M. Chaffee, numbered 19,347, dated February 16th, 1858, for a cellular india-rubber door-mat, construed, and, upon the construction given, the defendants *held* not to have infringed.

Where it appeared, that the two contrivances did not perform the same function by the same means; and that the defendants' products are unfit for the use for which the complainants' products are intended, and the complainants' products are unfit for use for the purposes for which the defendants' are designed, no infringement is proved.

(Before SHEPLEY, J., District of Massachusetts, February, 1878.)

SHEPLEY, J.

The patent to Chaffee, No. 19,347, under which com-

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plainants have filed this bill, is for "a cellular india-rubber door-mat," composed of caoutchouc and its compounds, or equivalent gums. The thing invented, described in the specification, and covered by the claim in the letters patent, is a mat of rubber, gutta-percha, or other flexible gums, formed by ridges or gratings, to serve as scrapers to clean the feet, and cells or spaces, of whatever form, to contain the dirt. It is not material that the ribs or ridges should intersect or cross each other at such an angle as will form a lozenge-shaped cell, in the manner described by the patentee as that usually adopted by him as the best mode of construction. The ridges may be circular, parallel, serpentine, or of any other shape that will allow them to act as scrapers to clean the feet, and to leave cells or spaces, of whatever form, to hold the dirt removed by the scrapers. The dirt-cells may be closed at the bottom, or open, to allow the water to run out. Three things only are necessary, and these are indispensable to constitute the thing secured by the patent. First, a flexible-gum mat; second, flexible-gum ridges to serve as scrapers; third, cells or inclosed spaces to contain the dirt. While the patentee does not use the phrase "inclosed spaces," he describes his spaces as spaces which contain, and are made for the purpose of containing, dirt. Such cells or spaces are necessarily something more than mere extents of uninclosed space. The patentee describes for this purpose a border around the mat, which would make such cells or inclosed spaces to contain the dirt, even if the gratings were parallel, serpentine, or otherwise so constructed as not to intersect each other and form cells.

The defendants are charged with infringement, by the manufacture of certain articles designed to constitute the steps of wheeled carriages, and others constructed for permanent attachment to the steps of cars. The contrivances for carriage-steps are all of them formed upon a plate of cast iron.

None of them are larger than about six inches in the greatest dimension. All of them have upon their backs an iron bolt, or projection, for the purpose of attaching them to the step-bracket of a carriage. The other exhibits are plates, the largest of which is not more than half the size of the smallest

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door-mat, with little hemispheres of rubber projecting less than a quarter of an inch above a surface of vulcanized rubber, or small pyramids of rubber, half an inch square at the base and an eighth of an inch high, set all over the surface of vulcanized rubber, base to base.

These contrivances differ from the cellular door-mat described in the Chaffee patent in the following particulars : the elevations or ridges in the Chaffee mat are designed and intended to present a flexible yielding surface, over which the foot may easily slide, so that the ridges may act as a brush would act if the foot were moved over it, and "serve as scrapers to clean the feet." The low pyramids, or hemispheres and projections in the defendants' contrivances, are designed and intended to give a firm frictional bearing for the foot, and to prevent any slipping or sliding over the surfaces of the elevations, and not intended "to serve as scrapers to clean the feet." The cells or depressed spaces in the Chaffee mat are intended and constructed "to hold the dirt." The depressions in defendants' contrivances are not intended or constructed "to hold the dirt," but are constructed rather as conduits or gutters, for the purpose of allowing and facilitating the automatic removal of mud, snow, and ice. They are purposely so arranged as to provide no recesses for the lodgement of snow, ice, or water. The low pyramids, hemispheres and projections are so constructed that in case any ice should be formed between them it would at once be broken, being very thin and supported only by the elastic base, by the pressure of the foot slipping on it, and the broken ice would be thrown off by the rebound of the base and the rubber projections, when the pressure is removed.

The function of the Chaffee mat is to present to the foot elastic resilient ridges, over which the foot may easily slide, that the ridges may act in place of brushes "as scrapers to clean the feet," and also to present convenient cells or spaces "to hold the dirt" thus removed. The function of the defendants' contrivances is to present to the foot a frictional bearing to prevent sliding or slipping, for the foot to rest firmly on, not to be scraped over, and grooves, or gutters, or depressions, not "to contain dirt," but to prevent it from being

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retained, and to facilitate the removal of mud, water, and ice. The two contrivances do not perform the same function by the same means, and the defendants' products are unfit for the use for which the complainants' products are intended, and the complainants' products are unfit for use for the purposes for which the carriage and car steps of the defendants are manufactured.

There is no evidence of infringement by the defendants, and the bill of complainants is dismissed with costs.

James E. Maynadier, for the complainants.

Thomas William Clarke, for the defendants.

THE BADISCHE ANILIN AND SODA FABRIK

vs.

THE HAMILTON MANUFACTURING COMPANY. IN EQUITY.

The provision of the Statute (Act of 1870, § 25), providing that, in case of a foreign patent, the United States patent shall expire at the same time with the foreign patent, is not retroactive in its operation, and does not apply to American patents granted before the law took effect, or to the reissues of such patents granted after the law took effect.

The right to reissue a patent in two divisions, one for the new process, and one for the new product, illustrated.

When a thing is produced new, in and of itself, it is patentable as a new manufacture.

A patent for a new manufacture is infringed by the manufacture of the new product by any process whatever.

Before the invention covered by complainants' patent "alizarine" had been used as a generic term, applied to many different dye stuffs, and yellow and green alizarines were in the market. Chemically pure alizarine existed only in the books, and a body approximating to it only in the laboratory of the chemist. The claim of complainants' reissued patent (Division B) was for "artificial alizarine produced from anthracene or its derivatives by either of the methods herein described, or by any

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other method which will produce a like result": *Held*, under the circumstances of the case, that the reissue was not void for claiming alizarine, which was before well known, but that the invention patented was the new composition, which contained, combined with alizarine, other bodies of themselves effective agents before unknown, and which existed for the first time when produced by the patentees.

(Before SHEPLEY, J., District of Massachusetts, February, 1878.)

SHEPLEY, J.

An objection is raised to the validity of the reissued letters patent, under which complainants claim that the original patent was taken out in England by Graebe and Liebermann, on the 16th of June, 1869, and was suffered to expire, by reason of the omission to pay the annual fees upon it, on the 18th of December, 1871, after the reissue of the American patent for the same invention, dated April 4th, 1871. It is contended that the patent in controversy was issued under the act of July 8th, 1870, and that as the 25th section of that act provided that an American patent "shall expire at the same time with the foreign patent" which has been obtained previous to the American patent, the reissue of the American patent expired on the 18th of December, 1871, when the English patent expired.

The act of March 3d, 1839, provided that, in all cases where a patent shall be granted after the same invention shall have been patented in a foreign country, "such patent shall be limited to the term of fourteen years from the date of publication of such foreign letters patent." The act of March 2d, 1861, provides "that all patents hereafter granted shall remain in force for the term of seventeen years from the date of issue," and repeals all acts and parts of acts before passed, inconsistent with the provisions of the act of 1861. The act of 1870, § 25, provides that in case of a prior foreign patent, the United States patent "shall expire at the same time with the foreign patent, or, if there be more than one, at the same time with the one having the shortest term."

The law of July 8th, 1870, Rev. Stat., § 4,887, was not retroactive, and did not operate to put an end to American patents granted before the law took effect. The original patent in this case was dated October 5th, 1869, before the

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passage of the act of 1870. Without a breach of good faith to the patentee, who had complied with the provisions of previous acts by disclosing his invention and paying the required fees, Congress could not take away any portion of the term of the patent, or any right to a reissue which existed under the laws in force when the patent was granted, and which formed a part of the contract between the parties. Nor is any such intention to be gathered from the words of the statute. The act of 1870 has not, in the practice of the Patent Office, been acted upon as retroactive. *Apperly v. Clissold*, Com. Dec., 1870, p. 164. This long-continued usage and practice of one of the departments of the Government is entitled to be considered by courts with great respect. The act of 1870, while repealing prior acts, contains a proviso saving all rights existing and all remedies which have arisen under any of said laws, and section 5,597 of the Revised Statutes contains a similar provision. The patent of Graebe and Liebermann, assigned to the complainants, did not, therefore, expire when the English patent became void by the omission to pay the annual fees.

The subject of the patent is a new and useful composition of matter, being an improvement in dyes or coloring matter produced from anthracene, and styled in the reissue as "artificial alizarine." Before the invention of Graebe and Liebermann the word "alizarine," a word coined from the Arabic and modern Greek names for madder, was commercially applied to a class embracing different varieties of dye-stuffs obtained from the madder plant. These dye-stuffs owed their value not only to a crystallized compound, which can be obtained from the madder and some other plants, known as "alizarine," but also to other materials existing naturally in the madder, or produced by the action of fermentation, heat, and the like, and by the aid of chemicals. The term "alizarine" was also applied by chemists to a theoretically pure crystallized extract from madder, whose formula was $C^{14}H^6O^4$. These madder extracts were among the most valuable dye-stuffs known to the world, and to supply the great and constantly increasing demand for them large tracts of land were devoted to the raising of madder.

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In 1868, Graebe and Liebermann, by a new process invented by them, produced their new composition of matter, now, for want of a name more accurately descriptive, called "artificial alizarine," a product unknown to both science and the arts at the date of their invention. Coal-tar (a substance containing a large number of the compounds caused by the various reactions which take place when coal is subjected in close vessels to intense heat), when submitted to a second distillation, yields at a very high temperature, as one of its products, anthracene, which, when purified, is a white, waxy substance. From this body named "anthracene," Graebe and Liebermann, by the series of chemical treatments described in the specifications, built up a beautiful and complex product, an artificial dye-stuff, now known as "artificial alizarine." This was not a chemically pure alizarine. Their process stopped far short of the elimination, from the product, of the bodies other than chemically pure alizarine. In fact, the presence of some of the other bodies appears to much enhance the value of the dye-stuff produced by their process. This product was one entirely new. The process by which they produced it was entirely new. Anthrapurpurine, isopurpurine, and other bodies, combined with alizarine in their product, are not known to have existed before they were produced by Graebe and Liebermann.

This composition of matter, which to a great degree has taken the place of madder preparations in the arts of dyeing and calico-printing, was new as to its origin. It was a purely artificial production, built up, as well as described by Professors Morton, Hedrick, and Ordway, by a process of chemical synthesis, from materials none of which contained it, or anything approaching to it, in character or properties. Its composition was new. It contained, combined with alizarine, other bodies of themselves effective dyeing agents before unknown, and existing for the first time when produced by Graebe and Liebermann. It was new not only in some of its new chemical properties, but in its capacity to produce, in dyeing and calico-printing, tints which cannot be obtained with the preparations of madder or any other dye-stuffs previously known.

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Objection is made to the validity of the reissued patent upon which this bill is brought. Graebe and Liebermann, on the 5th of October, 1869, obtained letters patent of the United States, No. 95,465, in which, after describing their process in the words contained in the reissue, they made the following claim: "The within-described process for the production of alizarine, by first preparing bibromanthrakinson or bicloranthrakinson, and then converting these substances into alizarine, substantially as above set forth." This patent was subsequently reissued in two divisions, one for the process and one for the product. In Division B, upon which this suit is brought, they claim: "Artificial alizarine produced from anthracene or its derivatives by either of the methods herein described, or by any other method which will produce a like result."

The right to reissue in two divisions, one for the new process and one for the new product, is fully sustained by the opinion of Mr. Justice Clifford, in *Goodyear v. Providence Rubber Co.*, 2 Fish., 510: "No doubt can be entertained that a new product or manufacture, and a new process or method of producing the new article, are the proper subjects of separate and distinct claims in an original patent, and, if so, then it is equally clear that the patentee, under that provision, upon a return of the patent for correction and reissue, and upon complying with the conditions therein specified, may have several patents for the distinct and separate parts of his invention."

When a thing is produced new, in and of itself, it is patentable as a new manufacture. If it be capable of being produced by various different processes, yet, when the product is new, independent of the process, the patent is infringed by the unlicensed manufacture of the new product by any mode of manufacture, the process of manufacture being wholly unimportant. *Merrill v. Yeomans*, 1 Holmes, 331; *Goodyear v. R. R.*, 1 Fish., 632. But defendants further contend that alizarine was a well-known substance long before the patent, and it could not be made the subject of any letters patent, and that the reissue is void as claiming alizarine broadly, and as claiming more than the invention

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described in the original. An examination of the original and the reissue will show that the same process and the same product is described in both. Before the invention, the name "alizarine" had been used as a generic term, applied to many different dye-stuffs, and yellow and green alizarines were in the market. Chemically pure alizarine existed only in the books, and a body approximating to it only in the laboratory of the chemist. As the new manufacture was intended to take the place of the dye-stuffs extracted from madder, and as, in common with those dye-stuffs, it owed a large proportion of its value as a dye to the presence of alizarine, it was not erroneous, although not accurately descriptive, to apply to this product of a distillation of coal treated with chemicals a name which had been applied to preparations from madder, without any more accuracy in one case than the other. Whatever Graebe and Liebermann called their product in the original or the reissue, it was a new product, and they showed what it was and how it could be produced. Pure alizarine, if it ever existed, except in chemical notation or laboratory experiment, could not have been made the subject of a patent. Nor have Graebe and Liebermann undertaken to patent alizarine, if by alizarine is meant what was known before their inventions to chemists as the body existing in dye-stuffs prepared from the madder. What they have patented is the new composition of matter and the new manufacture, having the described properties, produced from anthracene by any process which will produce their new product.

Before the discovery of the aniline dyes, Dahme and Unverdorven, by treating indigo, obtained a new substance, which was called "aniline," from *anil*, the word used in some countries for indigo, as *al-nil* is the Arabic for the indigo plant. When a similar substance was obtained from coal-tar, it was also called "aniline." But calling the dye thus obtained from coal-tar by the same name as the dye extracted from the indigo plant did not make the aniline dyes and the indigo dyes identical, although they are in some respects identical in composition. So, when Graebe and Liebermann's new dye was discovered, they at first called it "alizarine," from

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the Arabic, *Al-zari*, name of the madder plant. But calling their extract from anthracene by the same name which had been applied to the extracts from madder, did not necessarily imply that the two things were identical, as most surely they are not in fact, and are shown not to be by the specifications.

Reissue Division B must, therefore, be considered as a valid patent for a new manufacture and composition of matter, and as the evidence clearly proves an unlicensed use by the defendants, there must be a decree for injunction and account, according to the prayer of the bill.

George Gifford and J. Van Santvoord, for the complainants.

Edward N. Dickerson, for the defendants.

GEORGE H. WOOSTER

vs.

EDMUND W. TAYLOR, JR. ET AL. IN EQUITY.*

Where the profits made by a defendant from the unlawful use of a patented invention amount to more than the license fees for such use would amount to, the plaintiff, although exercising his monopoly by the granting of licenses, is entitled to recover such profits, on an accounting for profits, and is not limited to such license fees.

(Before WHEELER, J., Southern District of New York, February, 1878.)

WHEELER, J.

This cause has been heard on report and supplemental report of the master filed therein, exceptions thereto and argument of counsel. The reports show that the orator does not manufacture or sell his patented articles, but relies on license fees for his income from his patent; that such license fees, for the unlicensed use made by the defendants, paid at the beginning of each year, according to his rule, would amount

* 14 Blatchf., 403.

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to fourteen hundred dollars ; that they were stopped soon after the commencement of the second year, by an injunction, issued in this cause, on motion of the orator ; and that the profits actually realized by the defendants, from the use they had, amounted to nineteen hundred sixteen dollars and twenty-eight cents. Among other exceptions, the defendants have filed some that raise the question whether the orator is entitled to recover anything beyond the amount of what his license fees would have been ; and, if not, whether those should not be apportioned to the time they were suffered to use the invention. No other exceptions, besides those raising these questions, are insisted upon.

If the defendants had yielded to the orator's claims, and taken and paid for the licenses, the profits realized would have been theirs, and the orator would have had no just claim upon them. As they did not, the use they had of the invention was not theirs, but was the orator's, and what they realized from it, by force of the law, became his, and was not their own. By the express provision of the statute on this subject, the plaintiff is "entitled to recover, in addition to the profits to be accounted for by the defendant," the damages sustained by the infringement. Rev. Stats. U. S., sec. 4,921. This shows, that, in contemplation of law, the profits actually realized by the infringer belong to the patentee, and, that, when the profits would not compensate for the damages sustained, as they might not, in many cases, he is entitled to the damages beyond.

When it comes to the measure of damages, as distinguished from profits, in cases like this, the loss of the license fees might be the limit of the patentee's loss. But they are not, in any such case, the measure or limit of the infringer's gain. So, on many questions of damages strictly such, the license fees are evidence of damage, and, sometimes, the limit of recovery of damages, but cannot be evidence, and, much more, not a limit of profits to be accounted for.

If the question of damages beyond the profits was reached, and of any importance, it may be that the stoppage of the use of the patent by the injunction would make an apportionment of the license fees lawful and proper. But, as the profits

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exceed the damages, in any mode of reckoning the license fees, it is not necessary to consider the question made in that respect.

The exceptions are overruled, and the reports accepted and confirmed for the larger sum.

Frederic H. Betts, for the complainant.

James M. Townsend, for the defendants.

THE WILSON PACKING COMPANY ET AL.

vs.

WILLIAM B. CLAPP. IN EQUITY.

A preliminary injunction vacated in a case where the patentability and novelty of the complainants' invention were doubtful.

A preliminary injunction will not be granted against a defendant not residing in the district and having no place of business therein, and who is not shown to have made or sold the infringing articles in said district.

Remarks by the court upon the action of complainants, in sending circulars and notices to parties engaged in the trade, dealing with complainants' competitors, calculated to alarm such persons and injure the trade of competing manufacturers, before the complainants' rights are finally adjudicated.

(Before BLODGETT, J., Northern District of Illinois, February, 1878.)

BLODGETT, J.

On the 5th day of January last a motion was made by the complainants, based on the bill and affidavits previously filed, for an injunction restraining the defendant from putting up, manufacturing or selling canned cooked corn-beef in such a manner as to infringe upon certain patents belonging to complainants, and particularly described in the bill. The bill and affidavits were not read, but, both parties being represented by counsel, it was conceded that a case was made for

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an injunction, and an injunction order was accordingly entered as prayed, with the understanding that defendant might move for the vacation of said order as soon as counsel could prepare their affidavits. The affidavits were soon after filed, and the motion submitted upon the allegations and proofs of the respective parties, and the briefs and arguments of counsel.

The bill charges that complainants own the three patents relating to the subject-matter of packing and preserving meats in hermetically sealed cans or packages. The first of said patents was issued in 1864 to W. C. Marshall ; the second was issued in 1874 to W. J. Wilson ; and the third was issued in 1875 to J. A. Wilson. All these patents have been reissued, and two of them (the Marshall and one of the Wilson) within the past year. The claims are, briefly , for canned meat put up in the manner described "as a new article of commerce," and for some special improvements in the cans or packages, the principal of which is the shape of the can, the Wilson can being made in the form of a section of a pyramid with rounded corners, whereby the solidly packed contents of the can are turned out in a firm mass or cake, by cutting off the bottom or large end of the can, so that the beef can be readily cut in slices for the table.

The process of preserving fruits, vegetables, and meats in hermetically sealed cans or packages is not new or original to these patentees. In 1810, M. Appert published in France the details of the process then lately discovered by him for preserving fruits, vegetables and meat by parboiling or cooking them so as to expel the fixed air, and then sealing them up in air-tight cans, bottles or jars. This discovery was considered of so much importance to the world that the French Government paid M. Appert 10,000 francs for making it public, and the art has since then been extensively practised both in this country and in Europe. The Appert process was afterward improved by Durand, Doukin, Gamble and others in England, and by Winslow and others in this country, so that canned foods of various kinds had become an article of commerce long before the date of either of complainants' patents. 9 Encyclopedia Britannica, 767, title : *Food*,

published in 1855 ; 13 New American Cyclopedia, published in 1863, title : *Preservation of Food*, page 569.

The main and principal features of the art being so old, it will be at least a nice question how far a patent for each particular article of canned goods, "as a new article of commerce," can be sustained as a new invention. I do not mean to be understood as now saying that such patents are invalid for want of novelty. I only intend to say that, I think, courts should not be hasty or inconsiderate in granting injunctions, at the instance of the holders of such patents, against other manufacturers of similar goods. And, had the whole facts been brought to my notice, as they are now, at the time the original motion was made, I feel sure I should not have granted the injunction. So far as the complainants' patents cover the cans they use, no special proof is put into the record. To the eye, the cans used by complainants and those said to have been sold by defendant appear to be, externally, substantially alike. But I doubt whether the pyramidal shape, which is the distinctive feature of complainants' can, is a patentable device. It would seem to be a shape so often adopted in other packages and moulds, when it is desirable to turn the contents out whole or solid, as to be no longer novel. Still, it may be patentable—I only intimate a doubt—and say, that I think a court should be cautious in regard to such a patent.

Aside from the objections that apply directly to the patents, it does not appear from the record that this defendant has ever made or sold any goods in the similitude of complainants' goods, in this district. He is the agent of a St. Louis packing company, for the sale of their goods in New York city, and does no business, and has no place of business, in this district. A preliminary injunction ought not, therefore, to issue against him in this district, because such a process cannot run beyond the territorial limits of the district—certainly not in an ordinary case—such as is made in this record. A case possibly might be made upon extraordinary facts, which would justify such an issue, but such a case is not made here.

It also appears that, immediately on the entry of the order in this case, circulars and notices were sent outside of the

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district to parties engaged in the trade, dealing with the complainants' competitors, intended to alarm such persons, and injure the trade of competing manufacturers. This strikes me as hardly justifiable under the circumstances. I think complainants, if they have faith in their patent, should make their attack directly on such competitors as they claim are infringing their patents, and contest the question squarely with them. This class of goods has now, according to the proofs, gone into very general use as an article of food, and can be found for sale in most family groceries; and it seems to me not the right course to attack these dealers, and annoy and intimidate them by threats of patent suits. The course taken by complainants suggests the charge, that they intend to obtain many of the advantages of an injunction by harassing and interfering with the business of a rival without taking the risk of a direct suit with that rival, where they would be responsible for the consequences of their acts. Such may not have been their purpose, but it is liable to such construction.

The injunction is dissolved.

Munday & Evarts, West & Bond, John N. Jewett and T. A. Goodwin, for the complainants.

Eldridge & Tourtelotte, Noble & Orrick and Coburn & Thacher, for the defendant.

THE SINGER MANUFACTURING COMPANY

vs.

NELS LARSEN. IN EQUITY.

If a sewing-machine has acquired a name which designates a mechanism or a peculiar construction, parts of which are protected by patents, other persons, after the expiration of the patents, have the right to construct the machine and call it by that name, because that only expresses the kind and quality of the machine.

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There can be no trade-mark for the name "Singer Sewing-Machine."

Although a person not connected with the Singer Manufacturing Company would have the right, after the patents have expired, to make a Singer sewing-machine and call it by that name, still, he would not be permitted to do any act, the necessary effect of which would be to intimate, or make any one believe, that the machine which he constructs and sells is manufactured by that company.

(Before DRUMMOND, J., Northern District of Illinois, February, 1878.)

DRUMMOND, J.

Under the evidence in this case, I think there can be no doubt that the plaintiff cannot claim the exclusive right to manufacture the "Singer Sewing-Machine." All that it can claim is to make a machine of its own peculiar manufacture, with a device in the nature of a trade-mark. Otherwise, after a patent has expired which has established the nomenclature of a sewing-machine, as the Howe patent, or the Wilson patent, the patentee might go on and have the benefit of the patent indefinitely.

On a machine called "The Singer Sewing-Machine," there were various patents. These patents have all expired, and nothing can, therefore, be claimed under them. Other persons cannot be prevented from manufacturing a machine like the Singer sewing-machine, and which may be called, to distinguish it from other machines, "Singer's Sewing-Machine." If a sewing-machine has acquired a name which designates a mechanism or a peculiar construction, parts of which are protected by patents, other persons, after the expiration of the patents, have the right to construct the machine and call it by that name, because that only expresses the kind and quality of the machine. I have read the reports of the case of the *Singer Manufacturing Company v. Wilson*, originally decided by the Master of the Rolls in England, and afterward on appeal, in the Chancery Division of the High Court of Justice, and again, on appeal from the latter court to the House of Lords, and I do not think it is necessary to controvert the general rule there laid down—that there must be something to indicate that the thing manufactured is not the same as that of the complainant, in other words, to show it is not manufactured by the plaintiff. That is, it is a question

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of manufacture, not of name. A person could not claim a right to construct a peculiar form of barrel as to dimensions and capacity merely, irrespective of any marks or brands impressed upon it. That of itself could not be a lawful trade-mark. The same rule would be applicable to the construction of a wagon or carriage, which, owing to some peculiarity, might possess a particular name, as that of the manufacturer. A man might construct a wagon or carriage precisely like it, and he would not be liable if he did not claim in some form that it was constructed by the manufacturer. The only principle upon which an action can be sustained under such circumstances, as I understand, is through a trade-mark. If there were a valid trade-mark called a "Singer Machine," then there would be some force in the plaintiff's claim. Here the plaintiff and the defendant have a trade-mark somewhat similar, and if there is on the machine manufactured by the plaintiff a valid trade-mark to indicate that it is of the plaintiff's manufacture, no one else ought to be permitted to put anything on his machine to show that it has been manufactured by the plaintiff; that is, to use the same trade-mark. It may be the defendant has made his machine to imitate the plaintiff's, and to induce people to believe that it is the same. But, as I have said, I do not think, under the circumstances of this case, there can be a trade-mark for the name "Singer Sewing-Machine."

An illustration is furnished in the opinion of the Lord Chancellor in the House of Lords, in the case already referred to. A carriage called a "brougham" had been in very general use for many years. If that were devised by a man of the same name, so that, from its peculiarity of construction, it was generally known by that name, it certainly cannot be claimed that the man who devised it, or his assignees, would have a sole right to construct a "brougham" for all time to come. If no patent existed upon it or any of its parts, any one who has the requisite skill could construct just such a "brougham" as was originally constructed. There could in such a case be no trade-mark which the law would protect in the name "brougham;" and I therefore do not think that the opinion of the House of Lords can be construed to mean

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what is claimed by the counsel of the plaintiff in this case. So that, while I hold that the defendant is not prevented from constructing a "Singer Sewing-Machine," still, he cannot be permitted to do any act, the necessary effect of which will be to intimate, or to make any one believe, that the machine which he constructs and sells is manufactured by the plaintiff. Neither has he the right to use any device which may be properly considered a trade-mark, so as to induce the public to believe that his machine has been manufactured by the plaintiff, and, therefore, I shall modify the injunction in this case by simply requiring the defendant to refrain from selling any Singer sewing-machines manufactured by any person or company other than the plaintiff, without indicating in some distinct manner that the said machines were not manufactured by the Singer Manufacturing Company.

William H. King, for the complainant.

W. B. Scates, for the defendant.

AUGUSTUS H. WONSON

vs.

BENJAMIN D. PETERSON ET AL. IN EQUITY.

The validity of Division B of reissued patent Number 4,599, dated October 17th, 1871, granted to James G. Tarr and Augustus H. Wonson, re-affirmed. *Tarr v. Folsom*, 1 Bann. & Ard., 24, followed.

Doubts expressed as to the validity of Division A of the said reissued patent.

The defence that the reissue is invalid on the ground that the patent does not contain a sufficient specification of the proportions of the ingredients to meet the requirements of the law, unless set up in the answer, cannot be considered.

The defendants held to infringe Division B of complainant's patent by the use of sulphuret of antimony in combination with oxide of copper and a suitable vehicle or medium, notwithstanding that, to the oxide of copper is

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added a small quantity of arsenite of copper or arsenate of copper, or both, it appearing that sulphuret of antimony is an earthy or mineral matter, which dissolves in water more slowly than the oxide of copper.

(Before SHEPLEY, J., District of Massachusetts, March, 1878.)

SHEPLEY, J.

In the case of *Tarr v. Folsom*, 1 Holmes, 312, this court decided that Division B of the reissued patent to Tarr and Wonson was not void by reason of describing an invention different from the one described and claimed in the original patent, because the original patent clearly suggested a marine paint composed of oxide of copper, an earthy or mineral base, and a vehicle or medium. A doubt was then entertained by the court, which it has since had occasion, on a motion in another case for a preliminary injunction, to express, that Division A could not be sustained for a paint compounded of two only of the ingredients, viz.: oxide of copper and a vehicle or medium. But, after careful re-examination in the light of the more elaborate discussion of the question in this case, the court adheres to the opinion that the invention substantially, though not accurately and fully described in the original patent, is the one more accurately and clearly described in the reissue Division B. The object of the reissue was to correct this inadvertence in the original description. There is no ground to conclude that it was intended to embrace something not invented by or known to the patentee at the time of his original application. The marine paint he described and made and sold had the three ingredients described and claimed in Division B. The substance he mixed with the vehicle or medium was a substance produced by roasting the pyritous friable ores, the exposure to air and heat converting the contained copper into an oxide, and the other mineral and earthy substances remaining after the roasting serving in the paint to interpose, between the particles of oxide of copper, substances which dissolve in sea-water more slowly than they do.

An objection is raised, in argument, against the validity of the reissue, on the ground that the patent does not contain a sufficient specification of the proportions of the ingredients,

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to meet the requirements of the law. This defence is not set up in the answer and cannot be considered. *Goodyear v. Providence Rubber Co.*, 2 Fisher, 509; *Rubber Co. v. Goodyear*, 9 Wall., 793.

The defence of the anticipation of this patent by the Wetterstedt patent was fully considered in *Tarr v. Folsom*. The disclaimer, in the Tarr and Wonson patent, of such mixtures as are referred to in the Wetterstedt patent should be construed as the Wetterstedt patent itself is to be construed.

That patent describes a ship's paint to be made of pulverized antimony and pure oxide of copper, in which a protective influence of the antimony upon the copper is incorrectly ascribed to a supposed galvanic action. The antimony in the Wetterstedt paint was not so used that it performed the function of a base, retarding the dissolution of the copper, by itself dissolving more slowly than the oxide of the copper.

The testimony of Brown and Gardner, when carefully considered, does not prove an anticipation of the Tarr and Wonson invention.

Sulphuret of antimony, used by defendants in their paint, is an earthy or mineral matter, which dissolves in water more slowly than the oxide of copper. It comes within the description of the retarding earthy or mineral basis described in the Division B, and the use of it, in combination with oxide of copper and a suitable vehicle or medium, constitutes infringement, notwithstanding to the oxide of copper is added a small quantity of arsenite of copper or arseniate of copper, or both.

Decree for injunction and account as prayed for in the bill.

Causten Browne, Browne, Holmes & Browne, for the complainant.

Chauncey Smith, Shattuck, Holmes & Munroe, for the defendants.

Rubber-Step Manufacturing Co. v. Metropolitan Railroad Co.

THE RUBBER-STEP MANUFACTURING COMPANY

vs.

THE METROPOLITAN RAILROAD COMPANY ET AL.
IN EQUITY.

An invention for covering the tread of a carriage-step with a vulcanized rubber clothing having an undulating surface was not anticipated by the use of rubber as a soling to stirrups, or as shoe-soles ; neither was it anticipated by the use of iron treads, with channels running to the margin, for door-steps and stairs, or for carriage-steps.

A rejected application for a patent to one person is not of itself a bar to a patent to another.

(Before SHEPLEY, J., District of Massachusetts, March, 1878.)

SHEPLEY, J.

To avoid the Keene patents for improvements in carriage-steps, defendants rely upon the Chaffee patent for door-mats. This has already been decided in this court, in the case of *Brown et al. v. Rubber-Step Manufacturing Company et al.*, not to anticipate the Keene invention, for the reasons fully stated in that case.

The Keene invention consists in covering the tread of a carriage-step with a vulcanized rubber clothing, having an undulating surface, whereby projections of rubber are presented upward to receive the pressure of the foot, and also in providing a permanent surface to the step resilient under the foot, the coating of rubber being somewhat adhesive to the foot, thereby having a tendency to prevent slipping in either dry or wet weather ; and in snowy or sleety weather, when trodden upon, adhering ice or snow is broken by the yielding of the rubber projections under pressure, and loosened upon the removal of the pressure of the foot by reason of the resiliency of the rubber, so as to be readily brushed off.

The fact that rubber had been used as a soling to stirrups

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and applied to shoe-soles, does not establish any anticipation of this invention. The use of iron treads, with channels running to the margin, for door-steps and stairs, or for carriage-steps, did not anticipate this invention. The metal projections became slippery, instead of adhesive to the foot, by wear, and there was no resiliency under the pressure of the foot, to effect the removal of the snow and ice.

The rejected application for a patent of Charles Ray is not of itself a bar to the patent of Keene, there being no evidence in the case that the alleged prior invention of Ray was ever perfected or brought to actual use, and not abandoned and never revived by the original inventor. *The Corn Planter Patent*, 23 Wall., 181, 210.

Decree for injunction and account, as prayed for in the bill.

Thomas William Clarke, for the complainants.

Benjamin Dean and Thomas Dean, for the defendants.

CALVIN L. HERRING

vs.

THE GAS CONSUMERS' ASSOCIATION. IN EQUITY.

A joint owner of a patent is liable in damages to the other joint owners for the infringement of the patent owned jointly. *Pitts v. Hall*, 3 Blatchf. C. C. R., 201, distinguished.

Although one joint owner of a patent can use the common patent without being liable to account to the other joint owners, he cannot use a patent infringing the common patent without liability to the other joint owners.

(Before DILLON and TREAT, JJ., Eastern District of Missouri, March, 1878.)

DILLON and TREAT, JJ.

The plaintiff avers, substantially, that he is owner of an undivided two-thirds interest in the patent described, and that the defendant is owner of the other undivided one-third

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interest ; that the defendant is using a device which is an infringement upon their common patent, and that he is so doing under cover of their common patent. Hence the claim for damages for said infringement ; not for the entire amount thereof, but for the plaintiff's proportion, to wit, two thirds. The direct question presented is whether an infringer of a patent can escape liability for his infringement because he is a joint owner of the original patent upon which the infringement occurs. The cases cited do not reach the precise point raised by this bill. It is evident that if a stranger was guilty of the infringement, he would be compelled to respond in damages. Can a part owner infringe the common patent and escape all liability? If he can, it is obvious that, however small his aliquot part, he can make the enjoyment of the patent valueless to his joint owners. He has, by virtue of the joint ownership, a right to use the patent, but he has no right more than a stranger to infringe the same. If there is an infringement, the right of recovery is in the party wronged. All the joint owners should ordinarily be parties plaintiff, but if the wrong-doer is one who is guilty to the damage of the other joint owners, the latter should not be left remediless. As to such infringement they are strangers. All the joint owners are on the record, and the amount of the recovery determines their respective interests. The infringer cannot escape the consequences of his wrong to his joint owners by averring that he was, by his infringement, injuring, not his joint owners alone, but himself also. In other words, he cannot, under cover of his interest in the common patent, shield every wrong-doer who may infringe the patent. He can, as to the other part owners, by infringing, become liable to them for the wrong done. The amount of the recovery will be in proportion to their respective interests. Were this not so, the door would be open to the grossest fraud by one joint owner against all the other joint owners. The case of *Pitts v. Hall*, 2 Blatchf. C. C. R., 229, and the comments thereon in Curtis on Patents, sections 118 *et seq.*, do not cover this case. The questions there discussed pertain to the use, by one joint owner, of the common property. The difficulties in maintaining an action for an infringement, against a joint owner

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who merely uses the common patent, may be insurmountable. As to that, no opinion is expressed. In this case, an entirely new and distinct proposition is presented, viz.: One of the several joint owners is not using the common patent, but an infringing patent. His defence is that, inasmuch as he had a right to use the original patent without question from his joint owners, despite the decision in *Pitts v. Hall*, *supra*, he has a right, also, to use any infringing patents, on the ground that his right to use the original being vested in him, his use of other and infringing patents did not cause any wrong or injury to himself as joint owner. In other words, the defendant contends that, as one joint owner, he could use the common patent without being liable to account to the other joint owners, and that he could not be sued as an infringer for using what he had a right to use by virtue of his proprietary interest; therefore, if he used an infringing device, he was only injuring himself, in what he had a proprietary right to. This would be correct if no interest except his own were involved, for a man may do what he pleases with his own, and *volenti non fit injuria* would be *a fortiori* applicable in such a case. If a stranger were using the infringing patent, this action would unquestionably lie against him, and the question before us is whether it will lie against a joint owner, or, in the language of the bill, whether he, "under cover" of his joint ownership, can infringe, and escape liability. So far as he acts outside of his interests or rights or powers as a joint owner, there is no adequate reason for treating him *quoad hoc* otherwise than as a stranger. If this be not so, then one joint owner must destroy, without remedy, the rights of the other joint owner. The demurrer is overruled.

J. H. Blair, for the complainant.

H. B. Wilson and *John McGuffey*, for the defendant.

Oliphant v. Salem Flouring Mills Co.

W. S. OLIPHANT

vs.

THE SALEM FLOURING MILLS COMPANY.*

The question, whether it is a violation of the statute, to mark with the word "patent" articles which are not patentable, discussed.

The action was brought to recover a penalty under section 4,901 of the Revised Statutes, for marking certain sacks of unpatented flour with the word "patent." The defendants demurred to the complaint, upon the ground that it did not state facts sufficient to constitute a cause of action: *Held*, that the allegation in the complaint "that all of said flour and sacks were the property of the defendant and patentable under the laws of the United States," was a sufficient allegation that the flour marked was patentable, and that it was not a sham allegation, as flour may be a patentable article.

(Before DEADY, J., U. S. District Court, District of Oregon, March, 1878.)

DEADY, J.

This action is brought by the plaintiff, who sues as well for himself as the United States, under the third clause of section 4,901 of the Revised Statutes, to recover of the defendant penalties for marking one thousand sacks of unpatented flour with the word "patent," "for the purpose of deceiving the public, and having it understood and believed by the public that the flour put into each of said sacks was patented."

The defendant demurs to the complaint, and for cause of demurrer alleges that it does not state facts sufficient to constitute a cause of action. Upon the argument of the demurrer, the only point made in support of it was that the article upon which the word "patent" is used must be a patentable one, entitled to be patented, and this must be sufficiently alleged.

The section of the Revised Statutes in question provides

* 5 Sawyer, 128.

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substantially that whoever, 1. "Marks upon anything made, used or sold by him, for which he has not obtained a patent, the name or any imitation" thereof of the patentee of such thing without his consent; or, 2. "Marks upon or affixes to any such patented article the word 'patent,' or 'patentee,' or the words 'letters patent,' or any word of like import, with intent to imitate or counterfeit the mark or device of the patentee," without his consent; or, 3. "Marks upon or affixes to any unpatented article the word 'patent,' or any word importing that the same is patented, for the purpose of deceiving the public, shall be liable, for every such offence, to a penalty of not less than one hundred dollars, with costs," to any person who shall sue for the same, one half to go to himself, and the other to the United States.

The first two clauses of this section are evidently intended to protect the patentee of a patented article against the fraudulent use of his name or device upon a spurious article, and it is equally manifest that the third clause is intended to protect the public against the fraudulent use of the word patent. What art, machine, composition, process, or result may be patented is largely a question of fact, which in most cases lies beyond the knowledge or observation of the mass of mankind, the public. To say whether an article is both novel and useful, and has "a sufficiency of invention" to entitle it to be patented, is often a difficult question, and one which in most cases requires the skill and research of experts to determine. It may be useful but not new, or the reverse, and in neither case is it patentable. But the word "patent" upon an article is *prima facie* an assertion that it has some peculiar value or merit sufficient to induce the government, upon a thorough examination of the subject, to give the inventor the exclusive right to make and vend the same. The impression which the fact ordinarily makes upon the mind is, that the article marked "patent" is in some respects more useful or desirable than articles of the same general kind or use which are not so marked. If, then, a person marks an unpatented article with the word "patent," the public are thereby liable to be deceived as to the character and value of the article. The act is a species of counterfeiting. This being so, the

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presumption is, until the contrary appears, that the mark was placed on the article with the intention to deceive. The falsehood is a badge of fraud.

To my mind it is clear, both upon the reason of the thing, and the plain words of the statute, that the penalty is incurred by marking an unpatented article with the word "patent," whether the same is patentable or not. The statute is made for the protection of the public, and is intended to prevent unscrupulous persons from imposing upon the community by the unauthorized and false use of the word "patent." But it must also appear that the article was so falsely marked with intent to deceive the public. Cases may arise in which it is apparent that the marking was done on unpatented articles in jest or ridicule, or as a mere fancy or caprice, under such circumstances that it is not possible that any one could be misled or deceived by it. A person might mark his dog or horse with the word "patent," but hardly with the intention to make the public believe that either was of any more use or value than any other like animal. And in such an extreme case the court might be able to say on demurrer to the complaint that there could not by any possibility have been any intention to deceive.

But in all ordinary cases, or cases in which there can be any doubt about it, the question of fraudulent intent or purpose to deceive is one for the jury. In passing upon it, the probability or improbability of the public being deceived by the alleged false marking will be taken into consideration by them. In this case, the court is unable to say, judicially or otherwise, that flour has never been patented, and cannot be; and more, that that is a fact of such general notoriety the public could not be deceived in regard to it. So far from this being the case, it is easy to conceive, in the light of the numberless patents for special preparations of farinaceous food, of flour being so prepared, either by means of peculiar machinery or some mixture with the grain of some chemical ingredient, as to be patentable. It is fair to presume that this flour was marked "patent" for some purpose. The demurrer admits that this purpose was to deceive the public, unless, as has been suggested, the court can say that such a result is impossible.

In *The United States v. Morris*, 2 Bond, 23, Mr. Justice Leavitt expressed the opinion that this statute did not apply to non-patentable articles. But this was mere *obiter* and without the argument. This opinion stands alone, and I am unable to concur with its reasoning or conclusions.

In *Nichols v. Newell*, 1 Fish., 647, as stated in Brightly's Dig., p. 637, it was decided that the object of this section "is to guard the public right to use unpatented articles; and to prevent deception, by assertions, that articles not entitled to that privilege, have been patented." The full report of the case is not obtainable here, but the reputation of the author of the digest is a sufficient guarantee that the effect of the decision is correctly given therein. From this it appears that the law applies to all unpatented articles, whether patentable or not, for the plain reason that the public should not be prevented from exercising their undoubted right to use unpatented articles by the false, and may be corrupt, assertion of any one, that they are patented.

In Law's Am. Dig. Pat. Cas., 585, the case of *Stephens v. Caldwell* is cited from the manuscript of Mr. Justice Sprague (1860). The digest says the penalty provided in this section "for affixing the word 'patent' to an unpatented article, is incurred as to all articles made and having such word affixed with a guilty purpose." It is probable from the context that the article involved in the case was a patentable one, but the language is clear and unqualified, and indicates plainly that no such limitation upon the ordinary signification of the word "unpatented" was thought of.

In *Walker v. Hawxhurst*, 5 Blatchf. C. C. R., 494, there was a verdict for the defendant and a motion for a new trial, on account of alleged error in the charge. In overruling the motion Mr. Justice Nelson said that the simple act of marking an article was not sufficient. "The marking must not only give the public to understand the fact of a patent, but the act must be done *malo animo*, with an intent to deceive; and this ingredient of the offence, which is essential to make it complete, must be left to, and be found by, the jury." It does not appear from the report what was the nature of the article marked, but there is no suggestion that it was at all material whether it was patentable or not.

Sperry v. Ribbans.

This demurrer was taken and argued upon the assumption that the complaint did not sufficiently allege that the flour was a patentable article ; and that if it did, it was a sham allegation, being manifestly false because it is impossible for flour to be patented. But upon examination of the complaint I am inclined to think that the allegation upon that subject is sufficient. It is "that all of said flour and sacks were the property of the defendant and patentable articles under the laws of the United States." This is not, as was contended, an allegation that the flour and sacks taken conjunctively, together, constituted one patentable article, but rather that all the flour and sacks, as such, that is, both sacks and flour, are patentable. But, however this may be, I regard the allegation as immaterial, and the complaint is sufficient without it. The demurrer is overruled.

Addison C. Gibbs and J. Quinn Thornton, for the plaintiff.

William H. Effinger and J. J. Shaw, for the defendant.

JOHN SPERRY

vs.

ROBERT C. RIBBANS ET AL.

SAME

vs.

THEODORE N. LOGAN ET AL. IN EQUITY.

Where a patentee had knowledge of the infringement for nearly two years before applying for a preliminary injunction, and had warned the defendants that they were infringers, a motion for such injunction was denied.

Sperry v. Ribbans.

Patentees must not expect from the court a greater degree of diligence than they themselves exhibit.

(Before NIXON, J., District of New Jersey, March, 1878.)

NIXON, J.

These are motions for preliminary injunctions in the two cases above stated. They are by the same complainant against different defendants ; but as they involve the same questions and have been argued together, they will be considered and decided together.

The application is to enjoin and restrain the defendants, " provisionally and during the pendency of the suits, from making, using or vending to others to be used, any boxes such as they have heretofore made or sold, or substantially the same as, or containing or embodying or making use of what is claimed substantially," in certain letters patent No. 40,507, " for improvement in manufacturing boxes," dated November 3d, 1863, and issued to the complainant. There has been no adjudication in favor of the validity of the patent ; and the counsel of the complainant relies mainly upon the long acquiescence of the public in his possession and use of the same, as a sufficient ground to authorize the court to grant the provisional injunction asked for.

The defendants, in their answers and affidavits, contend that the second claim of the said patent, which is alleged to be infringed, is not only void for want of novelty, but is bad in law, because there is nothing in the specification, drawings or models, which indicates any method of manufacturing a box from a single piece of wood. These, and a number of other questions, were ably discussed on the argument ; but one fact appeared, which seems to the court so decisive of the pending motions, that it is unnecessary, at the present stage of the case, to enter into an examination of the validity of the patent—an inquiry always to be avoided, if practicable, until the final hearing.

That fact was this : the complainant, who is also the patentee, learned, as early as the spring of 1876, that the defendants, George A. Mannie & Co., were manufacturing, and claimed the right to manufacture, the boxes now complained

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of as an infringement of the second claim of his patent. He states that he saw them and warned them that they were infringers. They would not desist, but insisted upon their right to continue the manufacture and sale. They did continue, and became, with the knowledge of the complainant, the largest producers of wooden boxes of any manufacturers in the market. The complainant quietly acquiesced for nearly two years, and did not serve the defendants with notice of their motions, until about three weeks ago, to wit : on the 6th and 7th of March, 1878.

Patentees must not expect from the court a greater degree of diligence than they themselves exhibit. Under the rules, these cases will be ready for final hearing at the next term of the court. Since the complainant has voluntarily acquiesced in the alleged infringement for twenty-two months, it is not unreasonable that the court, by refusing to interfere, should compel an involuntary acquiescence for six months longer ; and especially so, as there has been no suggestion that the defendants are unable to respond in damages for the legal consequences of their acts.

The motion, in each case, is denied.

F. C. Nye, for the complainant.

John Whithead, for the defendants.

THE HART, BLIVEN & MEAD MANUFACTURING COMPANY

vs.

JOSEPH B. SARGEANT ET AL. IN EQUITY.

The 3d claim of reissued letters patent No. 5,403, granted to plaintiffs as assignees of Horace K. Jones, May 13th, 1873, for improvements in machinery for graduating carpenters' squares, which claim is for "the contruction of the tool and socket so that the edge of the tool fits into a **V**-shaped recess, the angle of which is in line with the working-point of the tool, substantially as and for the purpose herein described;" *held*, not to be anticipated by prior patents in which the **V**-shaped grooves were not so arranged as to take hold of the cutting edge of the tool, as it is essential to the claim that the angle of the **V** be in line with the working-point of the tool.

Nor is the 6th claim of said patent, which is for "the clamping device for holding squares of varying tapers to be graduated, consisting of the fixed jaw P, the rocking adjustable jaw M, and the cam N, in combination, substantially as described," anticipated by prior patents for improved hand-vices which have no relevancy to a clamp which shall uniformly hold in proper position an article to be graduated by machinery.

The gist of the 5th claim of the said patent, "In a machine for cutting graduations on squares, etc., the combination of the gravers I and their holders H with cams G and springs d, for throwing the gravers out of action at predetermined periods of time during the stroke of the same to cut graduation-marks of varying lengths, substantially as described," is the "flying cut" as it is termed in the specification, and is infringed by a machine in which there is but one graver, and in which the square is moved along by an intermittent feed, the mode of operation by which the cutting of the graduating marks is effected being the same in both machines.

Held, also, that this claim was not anticipated by a machine not having the "flying cut."

(Before SHIPMAN, J., District of Connecticut, April, 1878.)

SHIPMAN, J.

This is a bill in equity, founded upon the alleged infringement by the defendants of reissued letters patent, dated May,

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13th, 1873, and granted to the plaintiffs, as assignees of Horace K. Jones, for improvements in machinery for graduating carpenters' squares. The original patent to the plaintiffs, then known as "The Hart Manufacturing Company," was dated August 10th, 1869.

The following were alleged to be the peculiar features of the invention : First. The cutting of the graduation marks or lines commenced at the measuring-edge, and from thence extended inward, instead of commencing at or near the centre of the square, whereby a clear and not a ragged cut was made at the measuring edge, and danger of deviation from the proper point at the edge was avoided. This peculiarity had been anticipated by the invention of Herman Whipple, which was patented March 17th, 1857.

Second. The lengths of the lines graved were regulated by arresting the cutting action of the graver when in motion, and allowing it to continue its forward movement without cutting the square, making what is called a "flying cut." This peculiarity is thus further described in the specification : "The gravers . . . are operated in such manner, by means of cams and springs, that the said gravers can be alternately thrown into and out of action during their stroke, and remain in action for a predetermined period of time to cut graduation-marks of varying lengths." The advantages of this mode of operation are that the lines are made of uniform depths, and that the inner end of the mark terminates abruptly, and that the chip is lifted from the line by the onward movement of the graver.

Third. The tool rests in the holder in a groove of the exact inclination of its sides, into which it fits, and is pressed into its position by a set-screw. This insures the tool always being reinserted in the same position when removed from the machine for sharpening.

Fourth. A new clamping device is used which holds firmly squares of varying tapers. The device is thus described in the specification : "P is a fixed jaw for holding the square to be graduated. This jaw is rigidly secured to the frame of the machine, so that its under face is parallel to the axis of the shaft D, or, in other words, parallel to that longitudinal

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line upon which the points of the series of gravers act. M is the movable jaw of the vice, which is held in place by screws passing through slots in the jaw M into the frame, so that said jaw is free to play up and down at either or both ends; and it is pressed up against the fixed jaw P (or against any object placed between said jaws) by means of the cam N, operated by the treadle O, to bear upon the jaw M near the middle of its length."

The gravers of plaintiffs' machine are arranged in sets, mounted on horizontal bars supported by two vertical revolving disks. There is a separate graver and separate tool-holder for each mark, so that, to graduate a square twenty-four inches long to sixteenths of an inch, three hundred and twenty-three gravers and tool-holders are required. One machine of this kind was in use at the factory of the plaintiffs for about eighteen months. During this time, Charles S. Bement, a workman in their employ, undertook to make, and did make for them, an improved machine which had but one graver and one tool-holder, and in which the square passed under the tool by means of an intermittent feed. A patent for this machine, which the defendants are now using, was granted to Mr. Bement on June 14th, 1870.

The plaintiffs claimed upon the trial that the Bement machine infringed the 2d, 3d, 5th, and 6th claims of their patent. It is unnecessary to examine the question of infringement of the 2d claim, as it was conceded that it was anticipated by the Whipple invention. The three remaining claims are as follows: "3. The construction of the tool and socket so that the edge of the tool fits into a V-shaped recess, the angle of which is in line with the working-point of the tool, substantially as and for the purpose herein described. 5. In a machine for cutting graduations on squares, etc., the combination of the gravers I and their holders H with cams G and springs d, for throwing the gravers out of action at predetermined periods of time during the stroke of the same to cut graduation-marks of varying lengths, substantially as described. 6. The clamping device for holding squares of varying tapers to be graduated, consisting of the fixed jaw P, the rocking adjustable jaw M, and the cam N, in combination, substantially as described."

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There is no question of infringement in regard to the 3d and 6th claims. The only question upon this part of the case is that of novelty. The defendants insist that the V-shaped recess of the third claim was anticipated by the patent of Millington and George, dated August 8th, 1854, and by the patent of Horace K. Jones, of January 31st, 1865, but in neither of these patents are the V-shaped grooves so arranged as, in the language of the plaintiffs' expert, to "take hold of the cutting-edge of the tool. They are not so arranged as to be invariably in the plane in which the tool makes its stroke." The essence of this claim is that the angle of the V is in line with the working-point of the tool. In the Millington and George patent the groove is on the upper side of the cutter, and in the Jones patent of 1865 the tool was held by the back and one side. The result was that in these two machines the cutting-edges were not necessarily placed accurately, and required frequent adjustment.

The defendants insist that the device which is mentioned in the 6th claim was anticipated by patents to Louis Tilliers, dated April 16th, 1861, and to Jeremy W. Bliss, dated November 30th, 1852. These were improved hand-vices, and have no relevancy to a clamp which shall uniformly hold in proper position an article to be graduated by machinery. Such a clamp must be so made that the square shall be necessarily placed in the position which is requisite to insure accuracy. In the plaintiffs' machine, the square was secured by a movable clamp from below the surface. This clamp pressed the square against a shelf, so that the fall of the square was parallel to the plane of action of the graver.

The defendants deny both infringement of the fifth claim and its novelty. The gist of the fifth claim is "the flying cut," as it is termed in the specification. This peculiarity is described in the claim to be the combination "for throwing the gravers out of action at predetermined periods of time during the stroke of the same to cut graduation-marks of varying lengths." The motion of the graver continues after cutting action has ceased.

The plaintiffs' machine contains an entire set of gravers. These revolve in a true circle, and the square remains sta-

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tionary. The defendants' machine has but one graver, and the square is moved along by an intermittent feed. The graver returns to its work, after one mark has been made, in a flattened circle. The form of the two machines is necessarily very different, but the mode of operation by which the cutting of the graduating-marks is effected is the same. Each machine has a "a flying cut." In each the cutting commences at the edge of the square, and the cutters are thrown out of their work during the stroke by the action of a spring and cam at a predetermined point, when cutting ceases and the forward motion of the cutters is continued. The differences in the mode of operation are formal and not substantial.

The defendants' machine is what it would naturally be from its early history. It was designed to be simply an improvement upon the plaintiffs' structure. It was made with the elder machine before the eye of the inventor. The leading features of the elder machine are retained, while a single graver was ingeniously substituted to do the work of a set of gravers.

Upon the question of novelty, the defendants rely upon the Whipple machine. It is only necessary to say that this machine does not have the flying cut. There is no progressive movement of the graver after it has ceased to cut. "The mark is terminated by arresting the forward motion of the carriage upon which the gravers are mounted." Differences of construction between the Whipple and plaintiffs' machines are pointed out by the plaintiffs, which it is not necessary to examine.

Let there be a decree for an injunction and an accounting in respect to the 3d, 5th, and 6th claims.

Charles E. Mitchell and Benjamin F. Thurston for the complainants.

Charles F. Blake and John S. Beach, for the defendants.

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THE AMERICAN MANUFACTURING COMPANY

v.s.

STEPHEN LANE, JR., ET AL. IN EQUITY.*

The invention set forth in letters patent granted to A. Stewart Black, July 14th, 1863, for an "improvement in tempering umbrella ribs," defined.

The first claim of said patent, namely, "Constructing the tempering die with a square hole, corresponding in size to the wire to be tempered, in order that the wire may be straightened in all directions and the flattened portions of the wire be brought in line with each other, as and for the purposes specified," is infringed by the use, for the tempering of umbrella ribs of U-shaped wire, with wider flattened parts in them, of a die formed of two plates, one above and one below, with the groove in one plate shallow and semi-elliptical, to accommodate one edge of the flattened parts of the rib, and with the groove in the other plate broader and deeper, and, in its cross-section, the shape of the body of the wire, with a channel opposite to and like the groove in the other plate, to accommodate the other edge of the flattened part of the rib.

The prior existence of a square hole or groove for the purpose of drawing through it square bars or strips of metal, to compress them and straighten them, does not anticipate the invention claimed in said first claim.

(Before BLATCHFORD, J., Southern District of New York, April, 1878.)

BLATCHFORD, J.

This is an application for a provisional injunction to restrain the alleged infringement of letters patent granted to A Stewart Black, July 14th, 1863. The specification of the patent sets forth that Black has "invented, made and applied to use a certain new and useful improvement in tempering umbrella ribs and similar articles." The specification says: "In tempering ribs for umbrellas and parasols and similar articles, great difficulty is experienced in obtaining a uniform temperature throughout the entire length, so as to temper all parts equally. Some parts are tempered too much and

* 14 Blatchf. C. C. R., 438.

bend in use, and others are not tempered enough and break. Besides this, the hardening operation renders the wire composing such ribs more or less crooked, and they have to be straightened at the time of tempering, while in a heated state. Various attempts have been made to effect these operations, however, with but partial success. The nature of my said invention consists in a peculiar construction of a grooved or perforated metallic tempering die, that is heated to a sufficient extent to temper the umbrella rib or similar steel article, and the groove or opening in said die, being straight and of the size required for containing such article, straightens it at the same time that its temper is drawn to the degree required. I make use of gas flames or jets to heat the said tempering die, whereby greater uniformity can be obtained in the same than by a fire heat, and said heat can be kept uniform, hour after hour, without especial attention, thus rendering my apparatus adapted to tempering in the most uniform and delicate manner, even when attended by boys, or comparatively unskilful workmen; whereas, the tempering of such articles has heretofore required the exercise of great judgment by skilful workmen." There are three figures of drawings referred to. Figure 1 "is a vertical section of the tempering apparatus, at the line $x x$, of Figure 2." Figure 2 "is a plan of said apparatus, partially in section, to show the interior." The specification proceeds: "In the drawing, a is a metallic bar, of the requisite size and length, with grooves planed or otherwise formed in the upper surface, as seen in the section, Figure 1, and these grooves are to be of the size required for admitting the wire forming the umbrella spoke or other article; and I prefer, for such ribs, that the grooves be formed with square corners, to allow the flattened parts of the ribs to pass, as illustrated in larger size in Figure 3, said flattened parts being made for the reception of the holes required at the ends and near the middle of such ribs, and, when placed in the said grooves, these flattened portions are diagonal and are brought properly into line with each other by the groove itself. The grooved bar a is to be covered with a second bar b , setting closely to the bar a , so as to form a perforated tempering die. It will be seen that

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this form of construction is preferable to any other in which the hole might be bored or formed partly in each bar, as this construction is the cheapest and most accurately made, although I do not confine myself in this particular. Where desired, the upper bar *b* may also be grooved with the same or a different-sized groove or channel, setting intermediate to those in the bar *a*; and the parts *a* and *b* may be held together by screws or otherwise. The perforated metallic tempering die made as aforesaid, and heated by competent means, will temper wire umbrella ribs, or similar articles passed through it, and hold the same in a straight position while being tempered, the wire or ribs being passed in at one end and forcing out the tempered rib at the other end." The specification then describes an apparatus for heating the dies, by means of gas-burners, and says, that, "by this device, the temperature of the dies is rendered uniform and continuous, and can be regulated with the greatest exactness, by the flow of gas admitted." There are three claims, as follows: (1.) "Constructing the tempering die with a square hole, corresponding in size to the wire to be tempered, in order that the wire may be straightened in all directions and the flattened portions of the wire be brought in line with each other, as and for the purposes specified." (2.) "Constructing the tempering die with the grooves in one of the half-pieces coming opposite the flat surface of the other half-piece, whereby the tempering dies are more easily made and kept in order, as set forth." (3.) "The tempering dies constructed, substantially as specified, and enclosed in a suitable casing in combination with gas-burners, applied substantially as shown, whereby the temperature of the said tempering dies is easily regulated and maintained with uniformity, as set forth."

The defendants have made umbrella frames called "paragon" frames, the ribs in which are constructed of U-shaped wire. Such wire cannot be tempered and straightened in a die with a square hole, if there are wider flattened parts in the wire. The die with a square hole can be used to temper and straighten only round wire, if there are wider flattened parts in the wire. The wire referred to in the specification

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of the plaintiff's patent is a round wire. The "paragon" ribs tempered and straightened by the defendants have wider flattened parts in them, and have been tempered and straightened by them in heated dies. The dies are formed of two plates, one above and one below. The groove in one plate is shallow and semi-elliptical, and the groove in the other plate is broader and deeper. The former groove accommodates one edge of the flattened parts of the rib, while the latter is, in its cross-section, the shape of the body of the wire, with a channel opposite to and like the groove in the other plate, to accommodate the other edge of the flattened parts of the rib. In the square-holed die, the wider flattened parts of the round wire are accommodated in the diagonal corners of the square hole, while the surface of the round wire touches the four sides of the square hole. In the defendants' die, the contour of the body of the wire touches the surface of the body of the groove at all points, while the wider flattened parts of the wire pass through the two narrow grooves.

In each of the two constructions of dies the result is attained of tempering and straightening the rib at the same time, and of doing this after the wider flattened parts have been formed in the rib. In each the groove is straight longitudinally, and is of the shape and size requisite not only to contain the rib, but to embrace and support it at such points as will serve to straighten it in its passage, and to admit at the same time of the free passage of the wider flattened parts through portions of the groove, which are so arranged as to keep such wider flattened parts of the rib in line with each other. In each the dies, when heated, will temper the rib, and hold all parts of it in a straight position while being tempered, and the tempering and straightening take place while the rib is moving through the groove longitudinally from end to end. The mode of operation of the two dies, in their use in connection with the wire which is passed through them, is the same. The defendants' tempering die is constructed with a hole which corresponds in size to the wire which is to be tempered, and, in tempering the wire, by drawing it through such hole when the die is heated, the wire is straightened in all directions, and the flattened portions of

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the wire are brought in line with each other. The language of the first claim of the plaintiff's patent describes the defendants' die and its effect on the wire that is drawn through it, except that such claim describes the hole in the die as square. The hole in the defendants' die is not mathematically square. But, the whole tenor of the specification shows that the meaning of the claim is, that the hole or groove shall be of such size and shape as to allow the body of the wire to go through and be straightened while it is being tempered, and also to allow the flattened parts of the wire to go through and be kept in line with themselves and with the body of the wire. For a round wire a square hole will accomplish all of these results. The corners of the square are merely supplementary spaces for the passage of the wider parts. The shape of the exterior walls of such spaces is manifestly immaterial, so long as the spaces exist and have exterior walls. In the patent the spaces are described as corners of a square. But, whether the two lines of the corner form a right angle with each other, or a greater angle than a right angle, or form together any other figure, is manifestly shown by the specification to be immaterial, so long as the walls of the groove hug the body of the wire and yet leave space for the wider flattened parts. The corners of the hole in the defendants' die, though not mathematically square, are, to all practical intents, square, so far as the supplementary spaces are concerned. The invention embodied in the first claim of the patent is found, in all particulars, in the defendants' dies. The first claim of the patent is not limited to a groove which is wholly in one of the two half-pieces of the die. That feature exists in the second claim ; but the specification states that a groove formed partly in each of the two half-pieces is contemplated by the inventor.

The specification is not artistically drawn. It seems to set out with describing the invention as being to draw the rib through a straight heated groove of the proper size in a metallic die, and it follows out that idea. It states the leaving of a space for the flattened parts of the rib to pass through, as a preferential construction. It would seem as if the intention originally was to claim broadly the tempering and straightening of the rib in a heated metallic die having a

straight groove in it of the size and shape of the rib. But there is no such claim. The first claim is narrowed to a construction which includes only a rib with flattened parts, and a groove which will accommodate such flattened parts, which are shown in Figure 3 of the drawing as projecting beyond the line of the body of the unflattened parts of the rib. The first claim does not include a rib which has no flattened parts, nor does it include a groove which will accommodate only a rib which has no flattened parts. It is contended by the defendants that the first claim claims merely a die with a square hole, as a structure, and that, if a square hole in a metallic die is shown to have existed before, the first claim is void for want of novelty. But, the fair construction of the first claim, in connection with the body of the specification, is a claim to the mode or process of tempering and straightening a rib which has a body, and flattened portions other than such body, by drawing the rib through a straight hole or groove in a heated metallic die, of the proper size and shape to at once embrace closely the body of the rib, and yet, by supplemental spaces in the groove, to allow such flattened portions to pass through freely and be brought in line with each other. The whole text of the specification shows that the invention is declared to be one of an improvement in tempering the rib, that is, in the process or mode of tempering it, and the description is declared to be a description of such improvement. The square hole or groove may have existed before and been used for the purpose of drawing through it square bars or strips of metal, to compress them and straighten them, but, such prior existence and use of the square groove does not anticipate the invention claimed in the first claim of the Black patent, as such invention is above defined. In such aspect, the use of the square groove in the manner and for the purpose indicated in such first claim is not the mere use of an old thing for a new purpose, or the mere application of the square groove to a new use.

The defendants adduce various prior inventions, but none of them anticipate the invention covered by the first claim of the patent. The Holland patent has semicircular grooves for straightening and tempering umbrella ribs, but makes

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no suggestion as to ribs with wider flattened parts. The Fox patent is for tempering and straightening cylindrical wire in circular grooves. The same is true of the Chesterman patent and the Maddin patent. The Hadfield and Shipman patent shows square holes and round holes through which to draw metallic strips, to temper them, but nothing is disclosed that suggests anything more than that round wire is to be drawn through a round groove and square wire or steel through a square groove. So far as appears, Black was the first person to perform the process described in the first claim of the patent by the means therein described, and thus the first to temper and straighten an umbrella rib having the wider flattened parts in it.

I do not see that there is any infringement of the second and third claims. Let an injunction issue as to the first claim.

Everett P. Wheeler, for the complainant.

John D. Shedlock, for the defendants.

WILLIAM WILKENS

vs.

NATHAN H. SPAFFORD. IN EQUITY.

S. made a contract with W. that, for a stipulated salary paid to S., he, W., was to have the exclusive benefit of the services of S. in making machinery and improvements in W.'s premises, and he was also to have the exclusive benefit of the inventive faculties of S., and of such inventions as he should make during the term of service. The term was one year, but at the expiration of that time, S. continued in the service of W. for some time longer without making any new agreement. During these times S. invented and constructed several machines, which were patented: *Held*, that W. was entitled to an exclusive use of these machines during the existence of the patents and any extensions, renewals or reissues thereof.

Before S. entered the service of W. he had invented and patented a machine

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which was not then practically useful, but which during the period of said service S. perfected at W.'s expense : *Held*, that W. was entitled to a license for the use of such machine.

(Before SHEPLEY, J., District of Massachusetts, April, 1878)

This was a suit in equity, brought to enforce the equitable rights of the complainant, under certain contracts, in machines and inventions for the treatment of bristles, made by a workman of complainant.

SHEPLEY, J.

It is clear from the evidence in this record that no contract was made until the conference took place between the parties in New York. Although no written contract was there made between the parties, it is not difficult, from the attending circumstances and the previous correspondence between the parties, and their subsequent conduct and dealings with each other, to determine with substantial accuracy what that contract was. Spafford had written, May 5, 1864, to Wilkens, proposing to go to Baltimore, "and go to work for you for a year, if you desire it, making improvements in your machinery." Wilkens' answer, May 19th, 1864, contains the following passage : " Supposing you write me on what terms, or how much compensation you would ask me to go to work and make inventions and improvements on my place in machinery, such as is used in my business, for my only benefit, and not to be used by any one without my permission, say for one year," etc. On the 24th of May, Spafford replies—among other things : " And to this end, am ready to engage my services to you for one year, as you have named in your letter, and to give you the exclusive benefit of the same in machinery and improvements about your premises. . . . You wished me to name my price. I think, your having the exclusive benefit of my invention, that it would not be unreasonable to name twenty-five hundred dollars for a year. This sum may seem large to you, but, in case I could improve your machinery so as to save double that amount annually in your business, then it would seem small. . . ."

May 30th, Wilkens replies to this letter, inviting Spafford to meet him in New York at his (Wilkens') expense, to " talk

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everything over," and saying, "I don't want anything except what is fair and right, and think we may agree, as I see nothing unreasonable in your proposition." The parties met in New York, and it appears clearly that the interview ended in an acceptance of Spafford's written propositions. The result follows that the contract was that Wilkens agreed to pay Spafford twenty-five hundred dollars a year; that Wilkens was to have the exclusive benefit of Spafford's services in making machinery and improvements in Wilkens' premises; that he was to have the exclusive benefit of his inventive faculties, and of such inventions as he should make during the term of service. And it also appears clearly that the engagement of Spafford was made with reference to the fact that Spafford had been engaged in inventing and experimenting upon machinery for working bristles—Wilkens being very extensively engaged in the business of manipulating bristles and manufacturing brushes from bristles. It clearly was in the contemplation of both parties that Wilkens should have the use of such machines as Spafford during the term should construct, with the skill acquired in his previous experiments, and also the exclusive use of such inventions as Spafford should make after the commencement and during the term of his employment, so as to give Wilkens "the exclusive benefit of the same" (Spafford's services), "in machinery and improvements," and "the exclusive benefit of my" (Spafford's) "invention"—that is, his inventive faculties during the year. Immediately upon the acceptance by Wilkens of Spafford's propositions, Spafford proceeds to purchase, on Wilkens' account and at his expense, the necessary tools and fittings for a shop for the experimenting upon and making machinery for manipulating bristles and spinning hair. Among other things, Spafford prepared drawings for a combing-machine. He charged Wilkens for the cost of the drawing-paper on which these drawings were made, and for his time and expenses during the eighteen days in which he was engaged in making the drawings and in the purchase of tools, and in visiting "places they spin hemp and manilla" to fit him to "make a machine for spinning the hair that will be an improvement on your" (Wilkens') "present ones." That Spaf-

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ford perfectly understood that he was employed to experiment on making inventions for Wilkens' benefit is fully proved by his own letter of June 21st to Wilkens, at the close of which he writes : " I have some patterns and small pieces of machinery, such as gears, springs, &c , which will be useful in experimenting, and are not of much value to me, which I will bring on or send on by express, if you think best."

On the 1st of July Spafford reached Baltimore, and his salary and services commenced under the contract for a year's time. At the expiration of the year Wilkens was in Europe, and Spafford continued his services under the original contract, and at the same salary, until December 8th, 1865, when Spafford wrote from Baltimore to Mr. Wilkens, in Germany, suggesting " that after one year from the time I " (Spafford) " came here we had no agreement, the old one having expired, and that it would be well for us to come to an understanding in regard to my patents and inventions." In this letter he " described the three new machines—dragger, comber, and separator—and gave their results," and told him he thought he could make three new labor-saving machines—rifling-machine, mixing-machine, and tampico and horse-hair machines—also spinning-machine for curled hair. Wilkens replied to this letter that he expected to start soon for home, and that, therefore, it would be useless for him to say anything in his letter in relation to Spafford's proposition, suggesting to him to go on slowly with as little expense as possible, until he (Wilkens) arrived, when they could talk everything over what to do next, adding, " I don't want you to stop until I come." Spafford remained without any modification of the contract at the same salary until after Wilkens' return, and the parties not agreeing upon a new contract, he left Wilkens' employment in May, 1867. During this time he invented and constructed the combing-machine, patented April 17th, 1866 ; the separator, patented February 20th, 1866 ; the bundler, patented April 17th, 1866 ; the leveller, or small dragger, patented October 30th, 1866, and the rifler, the model of which appears to have been completed September 15th, 1866. These inventions were made and patented while Spafford was " ex-

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perimenting " under a salary paid him to experiment upon, invent and construct such machines, and under his own agreement to give Wilkins " the exclusive benefit of the same" (services) " in machinery and improvements," and " the exclusive benefit of my" (Spafford's) " invention." They were made in shops and with machinery and tools furnished by Wilkins and at his expense, for the purpose of such experiments, inventions and constructions, at a cost variously estimated at from twenty-one to thirty thousand dollars, and estimated by Spafford at over twenty thousand dollars.

It appears very clearly that Wilkins is entitled to an exclusive license for the use of these machines during the existence of the patents, and any extensions, renewals or reissues of the same. *McClurg v. Kingsland*, 1 Howard, 202 ; *Whiting v. Graves*, 13 Off. Gaz., 455.

Before Spafford entered into the service of Wilkins he had invented and patented a dragging-machine for dragging bristles. This machine he afterwards perfected during his service with Wilkins. The original machine exhibited to Wilkins at Providence, regarding it in the light in which Spafford and Wilkins regarded it, and looking at its subsequent history, was evidently not a practically useful machine. On the other hand, its deficiencies apparently were rather structural than functional. It needed more mechanical perfection as a whole and in some of its operative parts, and such a substitution of better equivalents for some of the devices as a skilled mechanic could easily make, to render it practically useful. It needed the work of the skilled artisan more than the thought of the inventor. It needed only the crucial test of experience, of a trial test, to see how to make the mechanical devices perform their intended functions in the machine, rather than experiment as a step in invention. One or more of these machines were constructed by Spafford during his employment by Wilkins, for him and at his expense. That he should construct such machines for Wilkins was contemplated by both parties at the time of his employment. Wilkins is entitled to a license for the use of such machines so constructed, or whose construction was commenced by Spafford during the term of service.

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A decree for the complainant, in accordance with these views, may be drawn up and submitted to the court.

J. H. B. Latrobe and Causten Browne, for the complainant.

Chauncey Smith and George E. Betton, for the defendant.

ARTHUR PICKERING ET AL.

vs.

MICHAEL MCCULLOUGH, JR., ET AL. IN EQUITY.*

It is well settled that an abandonment of the use of a mechanical structure which has been perfected and the operative merit of which has been demonstrated by trial, will inure to the benefit of the public, and not to that of an original but subsequent inventor.

Reissued letters patent No. 6,166, granted to complainants, assignees of George Nimmo, December 8th, 1874, for an improvement in moulding crucibles, *held void*.

(Before McKENNAN, J., Western District of Pennsylvania, May, 1878.)

McKENNAN, J.

In deciding this case it is unnecessary to go beyond the proofs presented by the respondents touching the existence and use of a machine at Kier's works, in Pittsburg, for the manufacture of plumbago crucibles. That such machine was constructed before the date of Nimmo's patent is clearly established by the proofs. That it was capable of successful operation is the result of a decided preponderance of the evidence. That it was so constructed as to perform the distinguishing function of Nimmo's machine—viz., the guidance of the rib toward the axis of revolution of the mould, so that it could be withdrawn therefrom without touching the sides of the mould—is manifest from the drawing prepared from the description of those who operated and saw the machine. In a

* Affirmed by Supreme Court.

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word, in the mechanical forces employed, in mode of operation in so far as the essential feature of Nimmo's machine is concerned, and in the results produced, the machines are indistinguishable.

Why, then, is not the Kier machine an effectual anticipation of Nimmo's? The argument against this hypothesis is that it was an abandoned experiment. But the proof is, that it was a complete machine, that it operated for nearly a year, that crucibles were made upon it without any imperfection in form, and that the rib was removed from the mould by guiding it to the centre, and thence withdrawing it without touching the sides. True it is that it was not produced in evidence, and that it was not shown what had become of it. But these considerations tend rather to discredit the testimony touching the existence, construction and operation of the machine than to impress upon it the character of a mere experiment. If that testimony is believed, there can be no doubt that the machine was neither incomplete in construction nor ineffective in adaptation to the work for which it was intended.

And it is now too well settled to admit of controversy that an abandonment of the use of a mechanical structure which has been brought to such a degree of maturity, and whose operative merit has been demonstrated by trial, will inure to the benefit of the public, and not to that of even an original but subsequent inventor. *Bedford v. Hunt*, 1 Mason, 302; *Reed v. Cutter*, 1 Story, 59c; *Gayler v. Wilder*, 10 How., 498; *Coffin v. Ogden*, 18 Wall., 124. There is no sufficient reason to reject that testimony, and the result necessarily is, that the bill must be dismissed with costs.

J. E. Maynadier and R. Robb, for the complainants.

Bakewell & Kerr, for the defendants.

THE STAR SALT CASTER COMPANY ET AL.

vs.

CHARLES P. CROSSMAN ET AL. IN EQUITY.

Contracts touching the transfer, use and enjoyment of patented inventions are to be construed in the same way as contracts respecting other species of property, so as to carry into effect the intention of the parties, as collected from the language employed, the subject-matter, and the surrounding circumstances.

Where a subsequent patent is merely for an improvement upon a previous one, both patents may be valid ; but if the second includes the first, it could not be used without the consent of the owner of the first, nor could the owner of the first patent use the second without the consent of its owner.

Inventions secured by letters patent are property in the holder of the patent, and, as such, are as much entitled to protection as any other species of property consisting of a franchise, during the term for which the franchise or exclusive right is granted.

The owner of a patent may sell, assign, lease or give away such property ; or enter into any arrangement or agreement respecting the same, not enlarging the right granted, as he might with any other personal property.

Where two patents were granted to different parties for salt pulverizers, the second of which could not be used without infringing the first, and the owner of the first patent made an agreement with the owner of the second, that he and his licensees would make *wooden* pulverizers only, and also consented that the owner of the second patent might work under the second patent, using only *metallic* pulverizers, and the owner of the first patent afterwards made *metallic* pulverizers in violation of the agreement : *Held*, that he was an infringer upon the second patent. *Held*, also, that parties who acquired a right under the first patent, with knowledge of the agreement, and who made *metallic* pulverizers, would also be liable as infringers.

(Before CLIFFORD, J., District of Massachusetts, May, 1878.)

CLIFFORD, J.

Contracts touching the transfer, use and enjoyment of patented inventions are to be construed in the same way as contracts respecting other species of property, so as to carry

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into effect the intention of the parties, as collected from the language employed, the subject-matter, and the surrounding circumstances. Add. on Cont. (7th ed.), 164. Two patents constitute the subject-matter of the present controversy, one of which, dated Sept. 15th, 1863, was granted to the first-named respondent. It purports to be for a new and useful improvement in salt boxes, casters, etc., the object of which, as the patentee states, is to prevent the salt in a salt box from forming into lumps and clogging up the perforations in the cover of the box. As stated in the specification, it consists in the employment or use, in a salt-box, of a stationary obstruction, formed by a series of arms extending across the box, or by wires or any other equivalent means, in such a manner that the salt will be pulverized by coming in contact with said obstruction whenever the box is shaken, for the purpose of giving a free discharge of the salt through the openings in the cover. Letters patent were also granted to George B. Richardson, dated December 3d, 1867, for an improved salt bottle or box, which, as described in the specification, consists in placing within a salt bottle or box a movable rod or pulverizer, made of cast metal or other suitable material, enlarged at each end, and provided with points or projections, so that, when the bottle is shaken, the pulverizer will move within it and effectually break up the salt so that it can escape freely through the perforated cap of the bottle. Glass bottles are usually employed, and, in constructing the same, the patentee states that he places a piece of cork or other suitable material at the bottom of the bottle, so as to deaden the blow of the pulverizer and prevent it from breaking the bottle when the latter is empty; and he states in his specification, in that connection, that his invention consists in the combination of that feature of the same with the bottle and the described pulverizer, but the claim is only for the pulverizer in combination with the bottle, called in the claim the receptacle.

Two patents of the kind may both be valid where the second is an improvement upon the first, in which event, if the second includes the first, neither can lawfully use that of the other without the other's consent. Plainly the second

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patent could not be used without the consent of the owner of the first, nor could the owner of the first patent use the second without the consent of the owner, as the patent contains an invention which the owner of the first patent never made. *Woodworth v. Rogers*, 3 W. & M., 120. These explanations are sufficient to show that ground of controversy existed between the parties in the enjoyment of the several rights secured to them by the respective patents, and the record shows that difficulty in that regard did arise between the respective owners of these letters patent, and that they entered into a compromise agreement in writing, which, for the sake of convenience and the purposes of this investigation, may be regarded as an agreement between the two patentees as the separate holders of the patents in question.

Two of the complainants, joined with the patentee of the second patent, have been stricken out of the pleadings by consent, and the others who remain, beside him, claim by virtue of his right under the agreement. Nor is there any difficulty in taking that view so far as respects the respondents, as the charge of the bill of complaint is, that those joined with the patentee of the first patent had knowledge of the agreement in question, which must be proved, to render them liable. By the terms of the agreement, the patentee of the second patent agreed to pay a royalty to the patentee of the first patent of two cents upon each and every dozen of salt bottles made in accordance with the second patent, whether made by him, as patentee of the second patent, or by his licensees, and to make a full and true return of the same the first day of each month, during the continuance of the agreement. On the other hand, the patentee of the first patent agreed that the caster bottles made in accordance with his patent shall be provided with wooden pulverizers, and that the salt bottles he, the patentee of the second patent, manufactures or allows to be manufactured, shall be provided, as at present, with metallic pulverizers. Based on that agreement, the bill of complaint alleges that by the contract it was agreed that all casters manufactured by the patentee of the first patent, under his patent, should contain wooden pulverizers only, and that all salt bottles or boxes manufac-

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tured by the patentee of the second patent, made under his patent, should contain only metallic pulverizers, and charges that the respondent and his licensees are manufacturing and selling casters or bottles furnished with metallic pulverizers, in violation of the said written agreement.

Service was made, and the respondents appeared and filed two answers.

1. Crossman admits the patents, but denies that there was any controversy between him and the complainants.

2. He alleges that the patentee of the second patent wanted a license from him, the patentee on the first patent, to use his invention as described in the first, and that the agreement related solely to the second patent and none other; that no rights under the first patent were, or were intended to be, conveyed to the complainants.

3. He admits the license to the other two respondents, but alleges that he excepted from the license any right to manufacture salt boxes or casters under the second patent.

Answer in due form was also filed by the other two respondents to the effect following:

1. That they are ignorant that any controversy existed between the separate owners of the patents as to their respective rights under the same.

2. They allege that the second patent was void, and that the agreement gave no right to the complainants under the first patent.

3. That the patentee of the first patent has kept and performed all the conditions of the written agreement.

4. That the patentee of the first patent had no right to make such an agreement, nor had the complainants any right to receive it, because it could not be conferred by such an agreement.

5. They deny infringement, and insist that the salt boxes or casters which they manufacture are constructed in accordance with the patent set up in their answer.

Demurrer was also filed by the two respondents, assigning several causes for the same, of which one only will be mentioned, which is, that three of the complainants therein named are not interested to maintain the bill of complaint. Sup-

pose there was such controversy between the parties to the written agreement as that alleged in the bill of complaint, it would not impair the validity or operative character of the agreement ; but it is not necessary to rest the decision upon that ground, as the evidence shows to the entire satisfaction of the court that the allegations of the bill of complaint in that regard are true, which is all that need be said in answer to the first defence.

Attempt is made by the second defence to give an interpretation to the written agreement, which the court cannot sustain. Instead of that, the court is of the opinion that, by the true construction of the agreement, the patentee of the first patent agreed that caster bottles made in accordance with the patent, whether manufactured by himself or his licensees, should be provided with wooden pulverizers, and that the salt bottles or casters constructed by the patentee of the second patent, or his licensees, should be provided with pulverizers such as the patentee of the second patent was constructing at the date of the written agreement. No reasons are assigned to support the proposition that the patentee of the first patent possessed no power to make such a contract, and it is believed that none can be which will be satisfactory. Inventions secured by letters patent are property in the holder of the patent, and as such are as much entitled to protection as any other property consisting of a franchise, during the term for which the franchise or the exclusive right is granted. Such a holder may sell, assign, lease, or give away the property, or enter into any arrangement or agreement respecting the same, not enlarging the right granted, as the same might make with any other personal property. Authorities to support that proposition are not necessary, as the statement of it is quite sufficient to secure in its behalf universal assent. Parties are supposed to mean what they say. If so, it is clear that the patentee of the first patent contracted to use wooden pulverizers only, and consented that the owner of the second patent might work under the second patent, using only metallic pulverizers, which is a sufficient response to all the propositions that the contract gave the patentee of the second patent no right to practise the

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invention secured by the first patent. Grant that, and it follows that the patentee of the first patent has not kept his covenants, as the proofs are full to the point that he has made, and is making, salt boxes or casters with metallic pulverizers, in direct violation of the agreement.

Two of the respondents claim that they are not liable, because, as they allege, they acquired the right to practise the invention secured by the first patent without any knowledge of the written agreement; but the proof is the other way, and shows not only that they knew what the terms of the agreement were, but that they had a copy of it in their possession when they acquired their right from the patentee of the first patent; nor is there any merit in the objection that some of the complainants have no interest to maintain the suit, as two of those mentioned have been stricken out by consent, and the record shows that the other acquired an interest in the second before the written agreement was executed.

Nothing remains to be considered but the charge of infringement. Sufficient has already been remarked to show that the first-named respondent has not kept and performed his covenants, and that the other two respondents, as his assignees, have manufactured and sold salt bottles in accordance with the patent mentioned in their answer, which the record shows has a pulverizer-rod with several series of radial points arranged in such a manner that the unscrewing of the cap from the neck of the bottle will produce a spiral motion of the points through the contents of the bottle. Crossman admits that his licensees have made salt boxes or casters with metallic pulverizers and sold the same, and that he has received payment for all they have sold. Taken as a whole, the evidence shows that the two respondents have made and sold salt boxes or casters provided with metallic pulverizers, in violation of the said written agreement, and with full knowledge of the existence of that agreement.

Decree for the complainants, for an account, and for an injunction.

George A. Bruce, for the complainants.

Thomas Weston, Jr., for the defendants.

DAVID W. ODIORNE

vs.

JOHN G. DENNEY. IN EQUITY.

Though the defendant's machine be more simple, cheaper, and possibly better than the complainant's patented machine, yet if its chief efficiency arises from the use of equivalents to the complainant's patent, it is infringement.

A prior patent of which no notice has been given will not be considered as bearing on the question of novelty.

Letters patent Number 149,480, dated April 7th, 1874, granted to John C. Hurcombe, for an improvement in machines for fixing metallic rings to umbrella-cases, held to be valid.

(Before NIXON, J., District of New Jersey, May, 1878.)

NIXON, J.

The bill is filed in this case for an injunction, profits and damages against the defendant, for infringing certain letters patent No. 149,480, and dated April 7th, 1874, for an "improvement in machines for fixing metallic rings to umbrella-cases," originally granted to John C. Hurcombe, and, by him assigned to the complainant.

The answer of the defendant denies the infringement, and justifies under letters patent No. 182,913, dated October 3d, 1876, and issued to one Robert J. Gemmill, for improvement in apparatus for attaching rings to umbrella-cases. It contains some general allegations, in paragraph 111, that Hurcombe was not the original and first inventor of any material or substantial part of the thing patented and described in the bill of complaint, and that the same has been in public use or on sale in this country for more than two years before his application for a patent. But as no notice was given to the complainant of any special matters to be proved in support of such general allegations, I shall pass at once to the only issue raised in the pleadings.

The complainant's patent is for a machine to be employed in the manufacture of umbrella cases. It embraces mechanism not new in itself, but never before combined in the same manner, or applied to the specific object for which it was designed. Umbrella-cases were usually made of enamelled cloth, and, before the invention described in the patent of the complainant, much difficulty and loss were experienced in their manufacture. The two longitudinal side edges were sewed together inside out. A grooved metallic ring was inserted in the smaller end of the case, and a string was tied around the cloth, pressing it into the groove, so as to attach the end of the case to the ring. It was then necessary to turn the case, and this was accomplished by pressing it over an umbrella, or over a stick of the general shape of an umbrella, and striping it down from the top or larger end. Sometimes the turning was effected by using a pair of sticks—the case being peeled off one stick onto the other, after the ring had been attached in the mode above described. These processes, however, were slow and comparatively costly—there being a great loss of material from the breaking and cracking of the enamel on the cloth, which could only be avoided by the application of heat to the case when turned.

In this state of the art, Hurcombe invented and patented the machine now owned by the complainant. He had two objects in view : (1) To fasten the ring to the umbrella-case more expeditiously and securely than by the old method of tying ; (2) to warm the post on which the case was placed inside out, in order to attach the ring, so that the case could be stripped off and turned without delay, and without loss by the cracking and chipping of the enamelled cloth. In the specifications of his patent he describes his invention as follows : " My invention consists, broadly, of a machine for clasping metallic ring-binders to the ends of umbrella-cases and to the ends of the gores of umbrella-covers, so as to confine the fabric between the edges of the metal binder ; such machine consisting of an anvil carrying a spring or yielding poppet-holder for the metal binder, and mounted upon a hollow heating-post, so as to retain and present the binder to the action of a clasping-hammer, the heating-post serving

to heat and hold the article while being united with the binder, and the spring poppet-holder performing the function of securing the clasped binder upon the anvil, to hold it in position to allow the umbrella-case to be turned right side out in effecting its removal in a heated condition from the post, while such machine combines in its construction a tubular standard connecting with the holding-post and a suitable heater, through which the anvil-post and the standard heated water is made to circulate. The object of such heating apparatus, in connection with the case-holder, is to allow the case to be withdrawn from the anvil post without danger of cracking, defacing, or tearing the glazed case, as would result from its removal in a cold condition."

After describing the drawings which accompany the specifications, he then makes eight claims, with none of which we have anything to do in the present case except the fifth, which, complainant alleges, the defendant's machine infringes. The claim is: "In a machine for clasping the metal binders to umbrella covers and cases, a hollow heated post or holder, E, for the umbrella-case, for the purpose stated." The purpose is clearly stated in the specifications, and to these we are entitled to look for the construction of the claim. Thus interpreting it, I am inclined to hold, in accordance with the views of the counsel for the complainant, that the essence of the invention is the use of an iron anvil-post heated at its surface, which comes in contact with the glazed surface of the cloth, thereby softening it at the moment the ring is being clasped to the cloth at the top of the anvil-post, so that it can at once be stripped from the post, and turned right side out as soon as the ring has been compressed and secured by the hammer.

The sole question presented by the pleadings and evidence is: Does the defendant's machine infringe the complainant's? His patent was taken out to accomplish the same results that were attempted in the Hurcombe invention. He calls it "an improvement in apparatus for attaching rings to umbrella-cases." He states that: "The object of his invention is to provide a simple and efficient machine for expeditiously attaching grooved metallic binding-rings to the ends of um-

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brella-cases and the gores of umbrella-covers, and to allow of the umbrella-case, clamped at its ends by the binding-ring, being turned right side out and removed from its holding-post without tearing or cracking the material of which said case is composed." He substitutes for the hollow, fixed, internally heated iron post of the complainant's patent a solid removable and externally heated iron post, over which the umbrella-case, having been drawn inside out, is drawn or passed. The metallic ring, which is to be affixed to the smaller end of the umbrella-case, is fitted over the end of the anvil-post, and then, instead of bringing down the hammer upon the post, he raises up the post by means of a treadle until it strikes an immovable case having a hollow, into which the top of the post enters, whereby the clasp of the ring to the umbrella-case is effected.

In the two machines there are a number of variations in the details of mechanical construction. But it seems to me that Gemmill has seized the principle of the complainant's patent and its mode of operation, and has studiously sought, by varying the instrumentalities, to avoid the charge of infringement.

The language of the late Justice McLean, in *Pitts v. Edmonds*, 2 Fish., 57, is pertinent here: "A patent, in calling for a specific mode, embraces in law all mechanical equivalents, or modes which operate on the same principle; consequently all modes, however changed in form, but which act substantially on the same principle, and effect the same end, are within the patent. If this were not so, a patent right would be of no value, as it might be avoided by any one who possessed ordinary mechanical skill."

The defendant's machine is more simple, cheaper, and possibly better. But its chief efficiency arises from the use of equivalents to the complainant's patent, and the law does not allow even so meritorious a class of men as inventors to appropriate the property of other people to their own use without making satisfactory compensation, or, at least, acknowledging their obligations.

The defendant has exhibited in his case a patent granted to one Shadrick H. Pierce in 1868, and his counsel on the

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argument laid much stress upon its specifications, claiming that they anticipated all the most valuable parts of the Hurcombe patent. But I have given no attention to it in considering this case, for the reason that the defendant is not allowed to surprise the patentee by evidence of a prior invention of which he has given no notice. See *O'Reilly v. Morse*, 15 How., 110.

I have been inclined to give a benign construction to the complainant's patent, not only because the court should not hasten to deprive patentees of the advantages of a real and meritorious invention on account of the awkward and clumsy manner in which their claims are stated, but also because the evidence strongly suggests, if it does not lead to the conviction, that the defence is a combination on the part of the defendant and his son-in-law, Gemmill, and the inventor, Hurcombe, to deprive the complainant, who has bought and paid liberally for the Hurcombe patent, from enjoying the fruits of his purchase.

Let a decree be entered for an injunction and an account.

B. F. Lee and *F. C. Bowman*, for the complainant.

Amos G. Hull and *R. J. Guillem*, for the defendant.

CHARLES GUIDET

vs.

THE CITY OF BROOKLYN. IN EQUITY.*

Letters patent Number 58,407, dated October 2d, 1866, granted to Charles Guidet for Belgian pavement: *Held*, to be invalid for want of novelty. (Before BLATCHFORD, J., Eastern District of New York, May, 1878.)

* Affirmed by Supreme Court.

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BLATCHFORD, J.

I think the evidence shows that the pavements which were laid down in Rochester and Buffalo, prior to the date of the plaintiff's alleged invention of what is covered by the claim of his patent, contained the substance and principle of the pavements laid down by the defendant, and alleged to infringe such claim, as respects all the points of such infringement. Whatever difference there is, is one of degree, finish and quality of stone, and not of structure or principle of arrangement, either as respects the stone blocks themselves or the pavement composed of them.

The bill is dismissed with costs.

G. Harding and W. H. Field, for the complainant.

G. Gifford, W. C. De Witt and W. C. Witter, for the defendant.

RAFAEL DE FLOREZ ET AL.

vs.

CHARLES T. RAYNOLDS ET AL. IN EQUITY.*

The invention described in the reissued letters patent granted to Moritz Pinner, November 1st, 1864, for an improvement in tin cans, (the original patent having been granted to Jean Bouvet, June 28th, 1864.) is not a different one from that described in the original patent, although, in the reissue, the device is described as applicable to different forms of construction of cans, and by different modes, from those in the original.

The decision of the Patent Office, in granting a patent, that the inventor had made the necessary preliminary statutory oath, is final.

Soldering a flat strip of metal over a slot, by soldering the edges of the strip to those of the slot, is not different from soldering a round wire into a slot, by connecting the edges of the slot with solder over the wire.

The necessary utility, to uphold a patent, considered.

* 14 Blatchf. C. C. R., 505.

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The requirement, in the patent, that the solder is to be torn, indicates that it must not be of a kind so hard that it cannot be torn.

A person who infringes a patent is liable for the infringement, although what he does may be an improvement upon the patented device:

The proof of infringement was the sale of a can by the defendants, purchased for and by the direction of the plaintiffs. The can was sold in the usual course of the defendants' business. On all the evidence, it was held that the defendants were dealing in the infringing cans in such a manner that, except as to the one can referred to, they were liable to account, and ought to be restrained by injunction.

(Before WHEELER, J., Southern District of New York, June, 1878.)

WHEELER, J.

This cause has been heard on pleadings, proofs, and arguments. The orators are owners of a patent for an alleged improvement in tin preserve cans, originally issued to Jean Bouvet, in letters No. 43,378, June 28th, 1864, assigned to Moritz Pinner, and reissued to him in letters No. 1,804, November 1st, 1864, and have brought this bill to restrain an alleged infringement, and for an account. The defendants deny the validity of the patent, for the reasons that, as they claim, the invention described in the reissue is different from that covered by the original; that it cannot be adjudged, on the proofs, that Bouvet was an original and first inventor, as in ordinary cases, because it does not appear by the record that he made oath that he was such inventor, nor that Pinner made oath that he was, nor that he believed that he was, and that it is not proved, otherwise than by the production of the letters, that he was; that the invention lacks utility; that it cannot be put into use by the method described; that the method described is not the best one for putting it into use; that what is claimed to be an infringement is not so; and that, if it is, no foundation for an account is shown.

The principal grounds of difference between the invention described in the reissue and that in the original, specified, are, that, in the reissue, the device is described as applicable to different forms of construction of cans and metallic vessels, and by different modes, from those in the original. These grounds, to some extent, seem to exist. But, to the extent

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shown to exist, they do not make it appear that the invention described in each is not the same. That may be used in many different ways, and be applied to many different subjects, and still be precisely the same thing. While this strict identity remains, it is not understood that any departure, however wide, in the reissue, concerning the mode or the subjects of application, will invalidate it. No variance touching the invention itself has been pointed out or noticed. So, that ground of objection must fail.

Bouvet signed a petition for letters patent for the invention, in which he stated that he had invented it, but not that he believed himself to be the original and first inventor of it. The Vice Consul of the United States at Paris, in France, certified that he personally appeared before him and made oath that he verily believed himself to be such inventor, but Bouvet did not sign that statement. So, he did not sign and make oath, both, to any statement of such belief. It is claimed, that both are necessary to show the necessary oath. This may or may not be correct. It is also claimed, that, as it is because patents are granted only upon oath, that they are *prima facie* valid, in this country, if it is shown that proof of an oath was lacking in the granting, the *prima facie* effect is done away with, and the patent must fail, unless supported by proof to the Court that the patentee was the original and first inventor. But, the law requires the oath to be made before the granting, as a condition precedent to it. Rev. Stat. U. S., sec. 4,892. With the oath, and other requisites, it was within the province of the Patent Office to grant the patent; without it, not to grant it, nor any qualified one, to be valid only on proof of priority of invention. The certificate of the Vice Consul had some moral tendency, at least, to show the necessary oath. It was the duty of the officers of that department to decide whether it was sufficiently shown or not. It must be presumed to have been passed upon according to the requirements of the law; and the law does not leave the validity of the patent open to be inquired into by the Courts, upon that ground, as it does for want of novelty and some other grounds expressly provided for. Rev. Stat. U. S., sec. 4,920. The decision of that tribunal upon

that question must be final, like that of others made competent by law to decide. The patent must be considered to be *prima facie* valid, like others.

The question of infringement, or not, is the most important one in the case, and the other remaining ones are so connected with that, that the disposition of will dispose of most of them. The plaintiffs' device consists in providing for opening cans without cutting the material of which they are made, or melting the solder with which it is fastened, by making a slot around, or nearly around, the part to be removed to open them, placing a wire, round, flattened, or of other shape, with one end projecting outward, into the slot, and connecting the sides of it with solder over the wire, so that, by lifting the wire outward by the projecting end, it will divide the solder and leave the part to be removed free to be taken out or turned outward. The defendants' device consists in placing a narrow strip of metal, with a projecting end, over a similar slot, and soldering the edges of the strip to those of the slot, so that, by lifting the strip outward, by the projecting end, it will divide the solder at the edges, uncover the slot, and leave the part to be removed likewise free to be taken out or turned outward. A comparison of these two contrivances with each other shows, quite clearly, that they accomplish the opening of the cans, each by tearing the pieces of metal, by the projecting ends, through the solder. The differences most relied upon by the defendants are, that, by the orators' method, they are put *into* the slot, while, by theirs, they are put *over* it, and that the orators use wire, while they use strips, and that the orators solder *over* them, while they solder the edges of them, and not over them. But, the thing to be accomplished is to connect the two edges of the slot by solder, with something between that can be removed without melting the solder, and it can be of no consequence, whether the thing between is in the slot or above it. The mode of unison is the same. Nor can it be of any importance, whether the solder extends all the way over across the intermediate piece, or only over the edges of it. There appears to be no doubt, but that it would be an infringement to use the plaintiffs' device by soldering the sides of the wire

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to the edges of the slot, without joining the solder over it. And, if the defendants' strip of metal is the equivalent of the wire, it is equally an infringement to join the edges of that to the slot with solder, without soldering over it. It is urged, that the strip is not a mechanical equivalent of the wire, and that, if it is, it was not known to be such at the date of Bouvet's invention. In the original specification, the wire was to be of any desirable shape to fit into the vacant space. This would include a flattened wire, if that shape would be desirable, and then it would be a flat strip of metal. But, if round wire only had been referred to, a strip of metal would be its ready equivalent, for the purpose of occupying a vacant space, to be soldered to. The leading conception and the idea are the same in each case, and those embodied in Bouvet's invention lead readily and directly to the defendants' device.

The defendants have undertaken to show lack of utility, by having cans made, as they claim, according to the letter of the specification in Bouvet's patent, which cannot readily be opened as desired. But, these cans are not made according to the specification. The solder extends around under the wire, when, by the specification, it would only extend over it. It is said that they can be made without the solder extending around the wire on the under side, only with difficulty. That may be so; but, if they can be made at all without, the invention may be of some, though not of great, utility, enough to uphold the patent for it. And, then, the solder in those specimens is quite hard. It is true, that the patent does not specify the kind of solder to be used. But, it proceeds, all the way, upon the requirement that the solder is to be torn, which would indicate, to a competent workman, that it must not be of a kind so hard that it cannot be torn. The invention covered by the orators' patent seems to be sufficiently useful to be patentable, and they have a patent for it. If the defendants infringe, they are liable for the infringement, although what they do may be an improvement upon the orators' method.

The infringement shown is by proof of the sale of a can by the defendants, purchased for and by the direction of the

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orators. It is claimed that the orators so participated in this transaction, that the defendants cannot be liable on account of it. This is, probably, true, and, if this was all the defendants have done, the orators would not be entitled to a decree. But, this can was purchased of the defendants in the usual course of their business, which is some evidence that they are dealing in those articles. This evidence they have not met and denied, but have rather supported. From it, it is found that they are dealing in these infringing cans in such a manner that, except as to this one purchased for the orators, they are liable to account, and to prevent which they should be restrained.

Let a decree be entered for an injunction and an account, accordingly.

William K. Hall and Joseph J. Marrin, for the complainants.

James A. Whitney, for the defendants.

THE STANLEY RULE AND LEVEL COMPANY

vs.

LEONARD BAILEY. IN EQUITY.*

B., a patentee, granted to S. the exclusive right to make and vend the invention during the life of the patent, for a royalty. S. sued B., in equity, alleging that he was infringing the patent: *Held*, that, whether S. was a licensee or a grantee, he was suing B. on an infringement, and that the Court had jurisdiction of the suit.

The conditions in the instrument executed by B. to S. were held to be conditions subsequent, and it was held that such right as passed to S. remained till a forfeiture was enforced.

The Victor plane, covered by letters patent granted to Leonard Bailey, December 12th, 1876, is an infringement of the third and fourth claims of the reissued letters patent granted to Leonard Bailey, June 22d, 1875, the original patent having been granted to him August 6th, 1867.

(Before SHIPMAN, J., District of Connecticut, June, 1878.)

* 14 Blatchf. C. C. R., 510.

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SHIPMAN, J.

This is a bill in equity to restrain the defendant from an alleged infringement of the plaintiff's exclusive right to make and vend the bench planes for which reissued letters patent, No. 6,498, dated June 22d, 1875, were granted to the defendant. The original patent was dated August 6th, 1867. The plaintiff is a Connecticut corporation. The defendant is a citizen and inhabitant of the town of Hartford, in this District. On May 19th, 1869, the defendant, being then and now the owner of said reissued letters patent, granted, by instrument in writing, to the plaintiff, "the exclusive right to make and vend said planes, (spokeshaves and veneer scrapers,) on the conditions and for the considerations hereinafter specified, said right to continue during the life of the patents above referred to, or any extensions thereof; that said Stanley Rule and Level Company agree to make and keep on hand a sufficient stock of said planes, (spokeshaves and veneer scrapers,) to supply all demands for the same, and to use diligence in the sale of them at their warehouses, to keep an accurate account of all sales made of said planes, (spokeshaves and veneer scrapers,) and to pay to said Leonard Bailey, his heirs, executors, or administrators, the sum of five *per cent.* on the prime cost of manufacturing said planes," etc., as a royalty for said exclusive use, to render an account of sales once in six months, and to pay such royalty within thirty days after the date of the semi-annual accounts. If the patentee should make any improvements upon said planes, the plaintiff had the right to use the improvements upon the same terms as hereinbefore expressed, and without additional royalty. The bill alleges, that, by virtue of this agreement, the plaintiff became the equitable owner of the reissued patent, and that the defendant's infringing its exclusive right by the manufacture and sale, in large numbers, without its permission, of planes made according to and containing the patented invention, or material and substantial parts thereof.

It is agreed, that the defendant is estopped to deny the novelty of said patented invention. He admits, in his answer, his title to the letters patent, and that he entered into said agreement, and that he has made and sold planes called

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the "Victor plane," but denies that they are an infringement of the reissued patent. The answer alleges, that the plaintiff has violated its agreement, and has, therefore, no right to have the aid of a Court of equity against the defendant. By amendments allowed when the case was argued, this general averment was made definite and explicit. Further time was not asked in which to take additional testimony.

It is not necessary, in this case, the patentee and legal owner of a patent being the alleged infringer, to determine whether, under the recited agreement, the plaintiff is the grantee of such an exclusive right that it can bring suit in its own name alone against strangers who are infringers, or is, as is claimed by the defendant, merely a licensee. In this case, the patentee is the alleged infringer, and the Circuit Court has jurisdiction of the cause, whether the plaintiff is grantee or licensee. When the patentee has infringed his license, and, while holding the legal title to the patent in trust for his licensee, has been faithless to his trust, "Courts of equity are always open to the redress of such a wrong. This wrong is an infringement. Its redress involves a suit, therefore, arising under the patent laws, and of that suit the Circuit Court has jurisdiction." *Littlefield v. Perry*, 21 Wall., 205, 223.

It is objected, by the defendant, that the bill is defective, inasmuch as the exclusive grant or license was granted under certain conditions, and it is not affirmatively averred that the plaintiff has kept and fulfilled the conditions, and thus has a continuing right to the enjoyment of the license. Assuming that the terms and considerations of the agreement, in regard to the exercise of diligence in the sale of the planes, and in regard to the payment of royalties, were conditions, and that, for the non-payment, or other non-performance, a forfeiture might be enforced, as for condition broken, the conditions were plainly conditions subsequent, and, ^{until} a forfeiture is enforced, the right or title which had ^{heretofore} vested remains in the licensee. *Littlefield v. Perry*, 21 Wall., 205. In this case, no notice had been given ^{by} the defendant, before the date of the suit, of any intention ^{to} claim a forfeiture.

The substantial question in the case is that of infringement, and the decision of this question depends much upon the construction which shall be given to the reissued patent, in view of the state of the art at the time of the invention. The portion of the invention which is in controversy relates to the means of adjustment to its work, of the plane iron, in a bench plane having double irons, or a compound plane iron. A compound plane iron, which is an old device, consists of the cutting iron, and an upper cap iron, or break iron, which does not cut, but, by its bevel edge, turns and breaks the shaving, so that it shall not run into the fibre of the wood. The cutting iron is thus allowed to make a smooth cut. Speaking very generally, the two irons are united by means of a screw, one iron or the other having a longitudinal slot, so that the relation of the cutter to the cap iron may be changed when the cutter is worn away by use. The means of adjustment are for the purpose of adjusting the plane iron to its work upon the wood, in accordance with the desire of the workman to make a deep or shallow cut.

Two planes are referred to as showing the existing state of the art prior to the invention of the plane of 1867. One was an invention of Mr. Bailey, patented in 1858. In this plane, the two irons were united by a screw, before being inserted in the stock. The plane iron had a centrally located, longitudinal slot, with a circular enlarged orifice at its upper end. The cap iron had a broad-headed clamp screw, the diameter of the head of the screw being greater than the width of the slot, while it was small enough to pass through the orifice at the upper end of the slot. The double iron was firmly secured in the stock by a cap lever. Thus the two irons can be adjusted to each other before being inserted in the stock, and are detachable from the stock, when united. This is the ordinary, and an old, form of compound plane iron. In such a double iron the screw is substantially a part of the cap plate. The plane iron was adjusted by the motion of a travelling seat or bed, which was attached to the stock, the travelling seat being moved to and from the throat of the plane by a lever.

The Hunt plane of 1860 had a compound plane iron, not

detachable from the stock, when united. The two irons could not be fastened together, or firmly adjusted, relatively to each other, before being inserted in the stock. When placed in the stock, they were both fastened by a screw to a moving slide, which was a part of the stock. The plane iron was adjusted to its work by a screw mechanism operating upon the moving slide or seat.

The invention of 1867 discarded a travelling seat or slide, and an adjustment of the plane iron by means of frictional contact between itself and the travelling seat, as in the plane of 1858. It connected the adjusting mechanism directly with the cap plate. The compound plane iron of the patent of 1858, that is to say, one in which the double irons were adjustably united before being inserted in the stock, was adjusted by means of a bent lever attached to the stock, and connected with the cap plate, and operated by screw mechanism. Overlying the longitudinal slot in the plane iron was a mortise in the cap iron. One end of the lever entered into the mortise, and, as the lever was moved, it positively and directly operated upon the cap iron, and moved forward and downward both cap iron and plane iron, which were clamped together and formed a compound plane iron. The invention consisted of the adjustment of the plane iron in the ordinary compound plane iron, by means of a lever and screw, or equivalent mechanism, which was positively connected with the cap iron at a point always the same, and acting upon the plane iron immediately through the cap plate thus connected with the lever. Adjustment through a travelling seat and its contact with the compound plane iron was abandoned, and adjustment was effected by a lever and screw, or its equivalent, positively acting upon the cap plate. The patentee caused his lever to act upon the cap plate through a mortise in the plate. Modifications of this method of connecting the adjusting mechanism with the cap plate could easily be suggested by mechanical skill, which would not vary the principle of the invention. If the lever should be connected with the cap plate upon its under face, or should be connected by a pin which was attached to the plate and extended through the slot, the principle of the invention would be unchanged. Equivalent

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mechanism, known at the date of the invention, which accomplished in the same way, and by the same mechanical means, the same result of adjustment by its direct and positive action upon the cap iron at a point always the same, the plane iron having variable relations with the cap plate, and thus with the adjusting mechanism, is protected by the patent.

The third claim of the reissue, is for "the combination of the nut *n*, lever *m*, and plate *h* with the plane-iron, substantially as described." The fourth claim is for "the combination of the plane iron, plate *h*," (cap plate,) "and lever *m*, substantially as described." Construed in connection with the descriptive part of the specification, and in view of the state of the art, the fourth claim is for the combination, substantially as described, of the cutter iron and cap iron, adjustably united by a screw in the cap iron to the plane iron, (being the ordinary compound plane iron,) and the lever operating, by positive connection with the cap iron, to adjust the cutting iron up and down between the same limits as those in which the cap iron can move.

The infringing device, called the "Victor plane," was patented to Leonard Bailey, December 12th, 1876. It has the compound plane iron of the Bailey patent of 1858, and substantially the double iron of the patent of 1867, with the exception that there is no mortise in the cap iron. The plane iron is adjusted by means of a gear wheel, carrying a crank pin, and secured to the stock by means of a short shaft. The crank pin is connected to a pitman which moves forward and backward, and has at its lower end a circular orifice for receiving the broad head of the screw which clamps the cap iron and plane iron together. Power applied to the gear wheel moves the crank pin and pitman, and, consequently, the screw head, which is a part of the cap plate. The cap plate is adjustably united to the cutting bit by the friction of the screw head, and through the cap plate the cutting iron is moved. The impulse is not directly imparted to the cutting bit, which receives its impulse because it is clamped through the slot, by the screw, to the cap plate. The adjusting device is positively connected with the cap plate and adjustably connected with the plane iron, the cap plate and plane iron

are kept in contact with each other by the strong clamp of the screw head, and motion is imparted to the plane iron by means of the positive connection of the adjusting mechanism with the cap plate. As stated by the plaintiff's expert, "in the Victor plane, the impulse of the adjusting device is imparted, through the medium of the cap plate, by a mere inversion of the parts shown in the Bailey reissued patent, that is to say, in the Victor plane the screw is a part of the cap iron, and forms a projection thereon, extending through the slot in the plane iron, and into a mortise in the adjusting device, whereas, in the reissued patent, a projection on the adjusting device extends up through a slot in the plane iron into a mortise in the cap iron ; and, in both devices, the result is precisely the same, to wit, the adjustment of the plane iron through the medium of the cap plate."

It is obvious, that the Victor plane is not the Bailey plane of 1858, neither is it a reproduction of the Hunt plane of 1860. In that plane, the adjusting device was attached to a traveling bed ; and, furthermore, while the Hunt plane has a compound plane iron, it has not the compound iron of the three Bailey planes. The Hunt plane has a compound plane iron in which the two irons cannot be united before they are inserted in the stock. This peculiarity made this plane practically unsuccessful, and, although, theoretically, the Bailey invention may be attached to the Hunt plane, I do not believe that, practically, such a combination would be successful.

The adjusting mechanism of the Victor plane is a well known equivalent for the lever and screw of the Bailey plane of 1867.

The defendant claims that the plaintiff has violated its agreement, in not using due diligence to sell the Bailey planes, and in devoting its time and attention improperly to a sale of a competing plane. The testimony shows that this averment is not at all sustained by the facts.

Let there be a decree for an injunction and an account, in respect to the third and fourth claims of the patent.

Charles E. Mitchell and *Benjamin F. Thurston*, for the complainant.

William E. Simonds and *Charles Levi Woodbury*, for the defendant.

Ingersoll v. Musgrove.

LORIN INGERSOLL

vs.

WILLIAM MUSGROVE ET AL.

SAME

vs.

DARIUS BENHAM ET AL. IN EQUITY.*

Where a patentee claims, in a suit, damages for a reduction of his prices, caused by the defendant by infringing the patent, he must establish, by satisfactory evidence, not only that a reduction of his prices was caused by the infringement, but how much such reduction was, and how much of it was occasioned by the acts of the defendant, and how much was due to the fact that the infringing articles contained the invention patented. Such evidence must not be estimate, conjecture and opinion, but must be such as to afford a sound and safe basis of calculation.

Where a patentee claims, as damages, a loss of profits caused by a loss of sales, resulting from an infringement, he must establish, by satisfactory evidence, that he would have sold more of the patented articles than he did sell if the infringing articles had not been sold, and what profit he would have made on them, and what part of such profit is to be assigned to the invention patented. Such evidence must not be conjecture and speculation.

(Before BLATCHFORD, J., Southern District of New York, June, 1878.)

BLATCHFORD, J.

The master reports that the defendants realized, as profits from the sale of infringing cuspidores, at least \$300 in the first case, on 1,003, and at least \$275, in the second case, on 2,225, but, that he is unable, from the proofs, to report what

* 14 Blatchf. C. C. R., 541.

Ingersoll v. Musgrove.

amount of such profits to them is attributable to the distinctive patented feature of said cuspidores, "the business of the defendants being different from the complainant's in relation to these goods." The plaintiff does not except to this part of the report.

The plaintiff sold, during the same time, 90,554 of the patented cuspidores, for a sum less by \$10,325 84 than the sum for which they would have sold at rates which ruled prior to the commencement of the infringements. The master reports that such reduction in price was, to a great extent, occasioned by such infringements by the defendants and other parties; that the infringements by the defendants occasioned a loss to the plaintiff, by the compulsory reduction of his prices, of 30 per cent. of the \$10,325 84, being \$3,097 76; that such loss was occasioned by reason of the fact that the infringing articles contained the patented features of the plaintiff's patented cuspidores; and that one half of such 30 per cent. of loss was occasioned by each set of defendants. The master attributes 70 per cent. of the reduction of prices to causes other than the infringements by the defendants. He, therefore, reports against each set of defendants, damages for the above cause, amounting to \$1,548 88.

He also reports, that, if the defendants in the first case had not sold the 1,003 infringing cuspidores, the plaintiff would have sold 1,003 more of the patented cuspidores than he did sell, and would have made a profit, on each, of 79 cents, or, in all, \$792 37, and that 85 per cent. of this, or \$673 56, is the amount of such profit to be assigned to the distinctive patented feature of the cuspidores. He, therefore, reports that amount, \$673 56, as additional damages against the defendants in the first suit. The aggregate damages against them he reports at \$2,118 94. The figures add up \$2,222.44.

He also reports, that it is not made to appear, that, if the defendants in the second case had not sold the 2,225 infringing cuspidores, the plaintiff would have sold an equal number of the patented cuspidores to the persons who purchased from said defendants. He, therefore, reports against said defendants damages to the amount of \$1,545 48, which should be \$1,548 88.

Ingersoll v. Musgrove.

I think it was a correct conclusion that the zinc cuspidore, with the bottom loaded with iron filings, was an infringement of the patent. It was composed of three metallic parts, formed and combined substantially as set forth in the Heath patent, with the excess of weight in the base. Although the self-righting feature is found in the Topham patent, that patent does not show the combination covered by the Heath patent.

The question, whether the prices which the plaintiff received for his cuspidores was less than those which he would have received but for the infringements by the defendants, is a question of fact. Such, also, is the question as to the amount of the reduction, and as to how much of it was occasioned by the acts of the defendants, and as to how much of it was attributable to the fact that the infringing articles contained the patented feature of the plaintiff's patented cuspidores. Such, also, is the question as to whether, if the infringing cuspidores had not been sold, the plaintiff would have sold any greater number of the patented cuspidores than he did sell, and what profit he would have made on them, and what part of such profit is to be assigned to the distinctive patented feature of the cuspidores.

It is for the plaintiff to establish, by satisfactory evidence, not only that a reduction of his prices was caused by the infringements, but how much such reduction was, and how much of it was occasioned by the acts of the defendants, and how much was due to the fact that the infringing articles contained the patented feature of the plaintiff's patented cuspidores. I am not satisfied with the conclusions of the master on this subject. The evidence on which those conclusions were reached was in the shape of estimate and conjecture and opinion, and afforded no proper basis for a report of actual damages by a forced reduction of prices. The allotment of 30 per cent. of such reduction to the infringements by the defendants, and to the fact that the infringing articles contained the patented features of the plaintiff's patented cuspidores, and of 70 per cent. of such reduction to other causes, is founded only on the conjectures, estimates and assertions of witnesses, and not on any sound and safe basis of calcula-

Ingersoll v. Murgrove.

tion. Moreover, it does not appear that the master at all considered the question as to the weight to be given to the fact that the sales of the plaintiff were unquestionably increased in number by the reduction of prices by him, resulting in profit on the added sales, and counterbalancing, to some extent, at least, diminution of profit on the rest of the sales.

So, also, it is for the plaintiff to establish, by satisfactory evidence, that he would have sold more of the patented cuspidores than he did sell, if the infringing cuspidores had not been sold, and what profit he would have made on them, and what part of such profit is to be assigned to the distinctive patented feature of the cuspidores. I see no proper foundation, in the evidence, for the conclusion, that, if the defendants in the first case had not sold the 1,003 infringing cuspidores, the plaintiff would have sold 1,003 more of the patented cuspidores than he did sell. The conclusion has no other basis than conjecture and speculation.

Only nominal damages should have been reported in each case. The plaintiff is entitled to recover costs other than the costs of the references before the master, and of the reports and exceptions, and of the hearings thereon, and the defendants are entitled to recover the costs of the references before the master, and of the reports and exceptions, and of the hearings thereon. The one set of costs, in each case, must be deducted from the other, and a decree be rendered for the difference, for the party in whose favor it shall exist.

Frederic H. Betts, for the complainant.

Benjamin F. Lee, William H. L. Lee and John H. Miller,
for the defendants.

Gottfried v. Bartholomae.

MATTHEW GOTTFRIED ET AL.

v.s.

FRANK BARTHOLOMAE ET AL.

SAME

v.s.

PETER FORTUNE ET AL.

SAME

v.s.

PETER SCHOENHOFEN. IN EQUITY.

A simple, economical invention is not anticipated by a complex and expensive one. A stationary apparatus for surface-coating the interior of barrels, in which an air-blast is forced up through a grate fire, and the escaping gases and products of combustion discharged into the barrel to heat its surface, is not anticipated by a device wherein the air-blast circulates through heated pipes and passes thence into the barrel.

Letters patent No. 42,580, issued to John F. T. Holbeck and Matthew Gottfried, May 3d, 1864, for an improved mode of pitching barrels, *held* to be valid, and to be infringed by round, portable machines producing and applying a similar blast for a similar purpose.

(Before BLODGETT, J., Northern District of Illinois, June, 1878.)

BLODGETT, J.

These are suits brought by the complainants as the owners of a patent issued by the United States to J. F. T. Holbeck and M. Gottfried, dated May 3, 1864, for an improved mode of pitching the inside of barrels. The complainants' inven-

Gottfried v. Bartholomae.

tion consists of a device by which air is driven through fire by a fan or blower, where it becomes heated to a high temperature, whence it is forced by the blast into the barrels so as to heat the inside of the barrels sufficiently to melt the pitch or resin which is used for the purpose of pitching the insides, so that it will readily flow into the cracks or pores of the wood. The cask is then closed and rolled until the melted resin has covered the entire inner surface. The complainants' device is a furnace, with grate-bars in the bottom, upon which the fire is built with anthracite coal, or any other combustible; underneath the grate-bars comes a pipe, to which is attached a fan or blower by which the blast of air is driven into and up through the ignited combustible, coal or wood as the case may be. The cask or barrel to be pitched is attached by the nozzles being inserted in the bung-hole, so that the air, which becomes heated by being forced through the fire, is expelled through the pipe into the cask, thereby heating the inside of the cask to such an extent as to melt the pitch or resin.

The defendants' two devices embody applications of the same principle. One is a portable device in which the fan or blower is attached by a pipe at the bottom; the air is driven through the fire, there being a grate-bar in the bottom, and the cask is attached upon the pipe. This is called the Vogt machine. The other, also portable, involves the same principle, but is so adjusted as to receive a large number of casks, the casks being suspended upon hooks so that the air-nozzles fit into the bung-holes, and the air is driven into them. This is known as the Shlaudeman machine. The object of all these devices is simply to coat the inner surface of the cask with pitch or resin, so as to make it more capable of holding liquids, especially ales and beers.

It must be admitted, I think, that the two devices—that of the complainants and those used by the defendants—are alike in their mode of operation and effect. There is no substantial difference in the principle upon which they operate; they both accomplish the same end by substantially the same means—that is, a blast of air driven through the fire and escaping into the cask.

The defendants contest the novelty of the complainants'

Gottfried v. Bartholomae.

device, and in support of their position rely upon a patent granted in England to Robert Davison and William Symington, in November, 1843, and upon the various devices for producing a hot-air blast in furnaces, such as the Neilson blast and the various other hot-air blasts in smelting-furnaces, where heated air is driven into the furnace for the purpose of securing a higher degree of heat and of increasing the melting-power of the furnace.

The Davison and Symington device was specifically arranged for the purpose of cleansing barrels; we have no model of that, but we have the specifications and drawings in connection with it. They show an arrangement for cleansing the inside of casks and barrels, and the inventors specially say that it is adapted to the cleansing of beer and ale casks particularly, so as to renovate them and make them available for further uses. That device combined several applications; one was the use of hot air, which was driven into the cask by a blast, in the same manner as in this case, except that the air was heated by being driven through heated tubes—that is, a nest or group of iron pipes was arranged in a furnace, and the pipes becoming hot, the air was driven through them into the cask, whereby the inner side of the cask became heated. By that it was claimed the must and various impurities were expelled. The same device, also, combined a mechanism for introducing a rough chain into the inner side of the barrel, and shaking or rolling the barrel with the chain inside, whereby the barrel was cleansed of impurities which stuck to the inside. Sometimes instead of using the chain, they used gravel or any other substance by which attrition upon the inside of the cask could be obtained. A further device was connected with the same mechanism for driving steam at a high temperature into the cask for the purpose of still further cleansing.

All these devices were intended really to cleanse the inside of the barrel, and not to pitch it; but it is obvious that heating the inside of the barrels, so as to melt the pitch, could have been accomplished by the Davison and Symington process—that is, when you once conceived the idea of the necessity of pitching or coating the inside of the barrel with any substance

Gottfried v. Bartholomae.

susceptible of being melted, it could be heated by the Davison and Symington process as readily as by the complainants' process. But the mechanism, it is noticeable, by which the heating was obtained, is widely different.

The complainants' process is perhaps the simplest process by which air can be heated and then driven into casks, and so simple that one can hardly deny that they should have a patent upon it if they were the first to invent it. All you have to do is to apply a simple fan or blower and drive the air through the fire. What the fire does not consume will, of course, escape into the cask in a heated condition, heated to the extent of the intensity of the fire. And one of the merits, so to speak, of the device is that by the very process of blowing or driving the air through the fire you increase the intensity of the fire, and, therefore, the intensity of the heat of the air which escapes into the cask. It is true that, with the heated air, will go some smoke and the products of the combustion, such as the carbonic-acid gas, etc., but for the purpose for which the complainants apply their device, that it is not objectionable—the only object being to get the inner surface of the cask heated sufficiently to melt the resin or other substance with which it is desired to coat it. That is accomplished by this process readily. And while, as I have already said, the Davison and Symington process may produce the same results, yet they produce them by a different mechanism, and a mechanism much more costly; it costs much more to make a machine, and fully as much, if not more, to operate it; you would have to produce heat enough in your furnace around your pipes to make the air sufficiently hot, and then keep up that heat by an additional blast of air into your furnace in addition to the blast which drives the air into your cask. So that the two mechanisms, while they produce the same result and reach the same end, do it by two different processes. Therefore, I do not think the Davison and Symington device anticipates the complainants'.

As I have already stated, the defendants' devices are but other forms of the complainants' device. The complainants drive their air by a fan or blower through the fire upon the grate-bars, into the cask to be heated; the defendants do

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the same, and by substantially the same mechanism. The method of attaching the pipe at the bottom, or anywhere below the grate-bars, is the same, and undoubtedly an infringement of the complainants' patent.

It is urged that the Shlaudeman device is different, because there is a device by which the air can be driven directly from the fan or blower into the cask. That would simply drive cold air in, or at most the air would only become heated to the extent of whatever heat there was in the chamber over the fire, as the air would not pass through the grate-bars. But, in so far as this machine provides for driving the air through the fire by turning a cock and closing the direct entrance into the chamber above the fire, the moment the upper aperture is closed, it becomes the complainants' machine to all intents and purposes.

I, therefore, hold that the infringement is clearly made out, and that the complainants are entitled to the relief claimed. Injunctions will accordingly be granted, and references ordered to the master to take proof, and report the damages the complainants have sustained by the defendants' infringement.

Banning & Banning, for the complainants.

Jussen & Anderson, for the defendants.

THE KEROSENE LAMP HEATER COMPANY

vs.

AARON P. LITTELL. IN EQUITY.

The action of the commissioner, in granting a reissue, conclusively settles the question that the original patent was inoperative or invalid by reason of a defective or insufficient specification, or by reason of the patentee claiming as his own invention more than he had a right to claim as new, and that the error arose by inadvertence, accident or mistake, and without any fraudulent or deceptive intention.

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It is patentable invention, where, by the coaction of the elementary parts of a combination, a new and practical result has been attained, which was not reached by their separate action before the combination was made.

The province and scope of reissues considered.

The question as to what constitutes new matter in a reissue of a patent for a combination discussed.

The first, second and third claims of complainant's reissued letters patent, Number 7069, dated April 18, 1876 (the original letters patent having been granted to Warren L. Fish, June 17th, 1862), for lamp chimneys, *held* valid, and that defendants infringe the same.

(Before McKENNAN and NIXON, JJ., District of New Jersey, June, 1878.)

NIXON, J.

The bill of complaint in this case is for the infringement of certain reissued letters patent No. 7,069, granted to the complainant corporation on the 18th of April, 1876, praying for an injunction and an account. The original patent No. 35,598 was issued to Warren L. Fish, June 17th, 1862. The defence is substantially embraced in three propositions: 1. That the reissue is void, not being for the same invention as the original patent. 2. That it has been anticipated by prior inventions. 3. That the defendant's stove is not an infringement.

Is the reissue for the same or a different invention? This question is answered by a comparison of the reissue with the original patent. It is the presumption of law that they are the same, and this presumption is only overthrown by finding elements or combinations in the one which do not substantially exist in the other.

The subject-matter of the patent is an apparatus for heating, in which the flame of the lamp is used as the heating agent. In the original the patentee calls his invention "a new and improved attachment to lamp chimneys." He says that "it consists in the arrangement of a receiver in combination with the chimney of a kerosene or other flame, in such a manner that water or other liquid poured into such receiver can be heated by the action of the flame in an easy and convenient manner; and of a window in the lower part of the metal chimney, in such a manner that the flame can be observed from the outside, and that sufficient light is allowed

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to pass out into the room to render the device available for a nurse-lamp." He claims as new—"1. A lamp-chimney *A* provided with a receiver *B*, substantially as and for the purpose shown and described. 2. The arrangement of the window *c* in the metal bulb *a* of the chimney *A*, as and for the purpose set forth."

Two intermediate reissues were obtained, one dated December 23d, 1862, No. 1,368, and the other dated January 5th, 1864, No. 1,596, which I will not stop to consider, as the comparison is to be made with the third reissue, dated April 18th, 1876, and numbered 7,069. In this reissue the claims are multiplied into four. The specification states that "the invention has for its object the utilization of the heat of the illuminating flame of kerosene oil lamps, and consists, first, in the combination, substantially as therein shown and described, of a kerosene oil lamp, deflector or cone, and a metallic heating-chamber or shell, adapted to support the vessel to be heated; second, in a kerosene oil lamp heater, in which the deflector or cone of the lamp is arranged in the bottom of the metallic heating chamber or shell that is adapted to support the vessel to be heated; third, in the combination of a kerosene oil lamp, a deflector or cone, and a metallic heating-chamber, under the arrangement substantially as shown and described, so that the air for the sustenance of the flame in the heater shall be admitted through the bottom of the heater, and the products of combustion shall pass off through a contracted opening in the top of the heater; fourth, in the combination of a kerosene oil lamp, a metallic shell adapted to support a vessel to be heated, and a window made of transparent material in the walls of the shell, substantially as therein set forth."

The action of the Commissioner of Patents in granting the reissue under section 4,916 of the Revised Statutes has conclusively settled the question that the original patent was inoperative or invalid by reason of a defective or insufficient specification, or by reason of the patentee claiming, as his own invention, more than he had a right to claim as new, and that the error arose by inadvertence, accident, or mistake, and without any fraudulent or deceptive intention. *Seymour*

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v. Osborne, 11 Wall., 516. The reissue, nevertheless, must be for the same invention. It may change the phraseology, correct the specification, and, under some circumstances, increase the number of claims of the original patent, but no new matter may be added to the schedule or specifications, nor any new claim made, unless the same were substantially embraced, indicated or suggested in the original description, claims, drawing or model.

In the case before the court the drawings are identical in the original and in the reissue, and if it shall appear on examination that nothing has been embraced in the reissue beyond what is fairly indicated in the drawings, it must be held, as a matter of legal construction, that the inventions claimed in the two patents are the same. In the description of the original patent, the patentee clearly indicates a combination. The elements of the combination are, (1) a receiver to hold the water to be heated; (2) a metallic lamp-chimney, of a peculiar construction, consisting of two parts—to wit, of a bulb and tube, fitting together and yet capable of separation, the tube being soldered to the receiver and removable with it from the bulb; (3) the flame of a kerosene or other lamp placed under the chimney in such a manner that the action of the flame will impart heat to the water. In addition to the foregoing—not in combination with it—is a window in the bulb of the chimney, so arranged that the flame is visible from the outside, and at the same time the window admits the light from the flame into the room.

In the reissue, the invention is described as a combination, and is made the subject of four clauses of claims. To this the counsel of the defendants objects, (1) because, as he alleges, the mechanism of the complainant's patent shows a mere aggregation of parts, and not an original and useful invention; and (2) because the patentee has introduced new matter into the claims, as, for instance, the slotted deflector and cone, and changed the scope of the original patent by limiting the heating flame to a kerosene lamp.

(1) It is true that a patent for a combination cannot be maintained where nothing is done except to bring well-known devices into juxtaposition, each working its own effect, and

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the aggregate producing no new and useful result. *Hailes v. Van Wormer*, 20 Wall., 353. Such a use of old elements involves no invention. But the complainant claims that the patentee has accomplished more than this; that a new and practical result has been attained by the coaction of the elementary parts of the combination, which was not reached by their separate action before the combination was made; and, in my judgment, the evidence sustains the claim.

(2) The second objection involves the consideration of the province of a reissue. It must be for the same invention; but, subject to this limitation, such changes may be introduced in the description, specifications or claims, as may be deemed necessary to give validity to the invention, and protect it against infringement. Whatever is fairly indicated, either in the schedules, drawing or model of the original, may be comprehended in the specifications and claims of a reissue, without subjecting the patentee to the imputation of claiming more than he is entitled to. *Jordan v. Dobson*, 4 Fisher, 232; *Parham v. Am. Buttonhole Co.*, id., 468; *Aultman v. Holley*, 11 Blatchf., C. C. R., 317; *Herring v. Nelson*, 12 Off. Gaz., 753. The identity of the invention, set forth in the original patent and the reissue, is a matter of legal construction, and is determined by a comparison of the two patents. *Seymour v. Osborne*, 11 Wall., 516; *Stevens v. Pritchard*, 10 Off. Gaz., 505.

Instituting this comparison in the present case, I find in the reissue some elements or constituents which did not appear in the specification or claims of the original patent; but I find nothing that was not substantially indicated by the original drawing. The same drawing was used in the reissue that had been filed with the papers on which the first patent was granted. The testimony for the defence seemed to be based upon the idea that the test of identity was what the inventor intended to do, rather than what he did. But the question is not, what did the patentee intend? but, what did he in fact invent? And sometimes the drawing which he filed more clearly discloses the invention than the specifications and claims, which are apt to partake more or less of the infirmity of human language.

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Mr. Dodge, the expert of the defendant, acknowledges that the drawings in the original and in the reissue are identical, and says that a device or apparatus constructed by following the drawing in the two cases would be identically the same. Unless, therefore, something can be found in the claims of the reissue which discloses another and different invention, the reissue will be valid notwithstanding the changes, verbal or otherwise, that have been introduced into the specifications and claims to make them correspond with, and conform to, the real invention.

These claims are as follows: "1. The combination, substantially as herein shown and described, of a kerosene oil lamp, a deflector or cone, and a metallic heating-chamber or shell, adapted to support a vessel to be heated. 2. A kerosene oil lamp heater, in which the deflector or cone of the lamp is arranged in the bottom of a metallic heating chamber or shell that is adapted to support the vessel to be heated. 3. The combination of a kerosene oil lamp, a deflector or cone, and a metallic heating-chamber, under the arrangement, substantially as herein shown and described, so that the air for the sustenance of the flame in the heater shall be admitted through the bottom of the heater, and the products of combustion shall pass off through a contracted opening in the top of the heater. 4. The combination of a kerosene oil lamp, a metallic shell adapted to support a vessel to be heated, and a window made of transparent material in the walls of the shell, substantially as herein set forth."

These claims speak of a combination, the elements of which are a kerosene oil lamp, a deflector or cone, and a metallic heating-chamber or shell, arranged in reference to each other in the manner described in the specifications, and shown in the drawings. The elements are all found in the original drawing, which expressly made a part of the specifications of the patent. A "kerosene lamp" is not mentioned by name, nor is a "slotted deflector or cone;" but the flame of a kerosene or other lamp "passing through a slotted deflector or cone" is so clearly exhibited that a mechanic of ordinary skill, having the drawing, would make no mistake and have no difficulty in constructing the device or ap-

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paratus, more fully set forth in the specifications of the reissue.

I first had the impression that the reissue in this case came within the principle of the reissue in *Gill v. Wills*, 22 Wall., 1, which the Supreme Court declared invalid because one of the elements of the original combination was dropped in the reissue, and a full description of several other devices in lieu thereof inserted without any allegation that they were equivalents of the one stricken out. Such a change was held to be the introduction of new matter, constituting a different invention, because it did not appear that the new devices were known at the date of the original invention as proper substitutes for the ingredient left out.

But it will be observed that the court did not say in that case, nor in view of their subsequent decision in *The Corn Planter Patent*, 23 Wall., 181, do I think it ought to be said, that when the patent is originally taken out for a single combination, a reissue may not be had in which a separate claim may not be made for sub-combinations of a part of the elements joined in one in the original invention. This subject has been so ably discussed by the late Judge Johnson, of the Second Circuit, in the case of *Herring v. Nelson*, 12 Off. Gaz., 753, that it is only necessary to refer to his opinion, as containing not only a satisfactory exposition of the law of reissue in the case of a patent for a combination, but also the grounds why the reissue in the case before the court should be deemed valid.

The remaining questions discussed at the hearing were, whether the invention was new, and whether the defendant's stove was an infringement. It would serve no good purpose to take up *seriatim* the large number of exhibits introduced by the defendant to prove that the complainant's patent has been anticipated by other inventions. They are useful as illustrating the state of the art at the date of the Fish invention. Patents for nurse-lamps, portable furnaces, lamp-stoves, gas-stoves, chafing-dishes, vapor-stoves, and various other articles of household economy, are brought forward, in nearly all of which something is doubtless found that bears a resemblance to some of the elements of the complainant's combination. They prove that the flame of a lamp has long been used for heat-

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ing and cooking purposes; that lamp heaters and stoves are not new; and that the vessel to be heated is generally supported upon a cylinder or shell, below which is placed the lamp, whether of oil, alcohol or kerosene, that supplies the heat; but I nowhere find, except in the patent of the complainant, in combination (a) a kerosene oil lamp, deflector or cone; (b) a metallic heating-chamber, adapted to support a vessel; (c) the arrangement whereby the air enters the heating-chamber only through the deflector; and (d) a contracted opening above the heating-chamber for the escape of the products of combustion.

Is the same combination found in the apparatus, or mechanism manufactured or sold by the defendant? He has exhibited the letters patent No. 156,149, dated October 20th, 1874, under which he justifies, and the complainant have produced a stove called the "Summer Queen," which the defendant has sold. An examination of these quite clearly shows a kerosene lamp in combination with a metallic heating-chamber or shell to support the vessel to be heated, with a deflector or cone in its bottom; and the bottom closed, except the slot in the cone through which alone the air enters the chamber; and a contracted opening above the heated chamber to produce a draft. It is hardly necessary to add that such a combination influences the first, second and third claims of the complainant's reissue.

I have spent no time on the fourth claim, because, in view of the state of the art at the time of the original patent, there would seem to be no invention in placing a window in the walls of the metallic chamber, whether it was designed to give light in the room or for the inspection of the flame. The device is old, and it is the merest aggregation to link it with other elements in order to make it the subject of a separate claim.

Let a decree be entered against the defendant for infringing the first, second and third claims of the complainant's patent, and for an injunction, and an account for profits and damages since the date of the last reissue.

A. Pollok and B. F. Lee, for the complainant.

W. W. Niles, for the defendant.

THE AMERICAN COTTON-TIE COMPANY

vs.

SIMON W. SIMMONS ET AL. IN EQUITY.

When the proprietors of a patented article sell it for the purpose of allowing it to be used in the ordinary pursuits of life, and to pass into the market of the country as an ordinary article of commerce, and subject to unrestricted purchase and sale, he waives his right to affix conditions or restrictions to its use and sale, and consents that, after one sale and the payment of one royalty, it shall pass out of the limits of the monopoly. *Hawley v. Mitchell* distinguished.

Complainants sold patented buckles for use, in connection with an iron strap, for a tie or fastening to cotton bales. The buckles had printed on them the words "licensed for one use only," and on the bill-head was a notice, either to the same effect, and that they were sold and purchased subject to the restriction, or, that the buckles were the property of the complainants, who reserved the right after such use to recover possession of them wherever found: *Held*, that the purchasers took an unrestricted title to the buckles without any reservation in the vendors, and that the case fell within the principles laid down in *Goodyear v. Beverly Rubber Cr.* 1 Cliff., 348, and *Washing Machine Co. v. Earle*, 3 Wall., Jr, 320.

(Before SHEPLEY, J., District of Rhode Island, June, 1878.)

SHEPLEY, J.

The complainants are engaged in the manufacture and sale of a patented buckle for use in connection with an iron strap for a tie or fastening to cotton bales. There can be no reasonable doubt that cotton-ties sold by defendants are covered by the patents under which complainants claim. Nor does the evidence in this case leave any reasonable doubt that the buckles sold by the defendants are the identical buckles made and sold by the complainants under their patent. The complainants contend that they sold the buckles under a restriction which limited them to one use, and did not convey an unrestricted title, and that the buckles never passed out of the monopoly of the patent. The facts

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are that the complainants sold the patented buckles with the words printed on them "Licensed to use once only," and that up to the season of 1876 on the bill-heads and invoices of all their agents were the words: "The cotton-ties sold by this invoice are licensed to be used only as bailing-ties, and are sold and purchased subject to this restriction." During the season of 1876 the following clause was printed on their bills: "The buckles accompanying these bands are the property of the American Cotton-Tie Company, limited, and are licensed to be used for one season only, the company reserving the right after such use to recover possession of them wherever found."

The company clearly had the right, in selling a patented article, to put a restriction on its use or sale, and to convey only a restricted title, or to license only a restricted use, and the purchaser under such a restricted title could not convey a greater or better title than he had himself. The law upon this subject was fully stated in *Hawley v. Mitchell*, 1 Holmes, 42, and affirmed in the Supreme Court of the United States, 16 Wall., 544. But when the proprietor of a patented article sells it for the purpose of allowing it to be used in the ordinary pursuits of life, and to pass into the market of the country as an ordinary article of commerce, and subject to unrestricted purchase and sale, he waives his right to affix conditions or restrictions to its use or sale, and consents that, after one sale and the payment of one royalty, it shall pass out of the limits of the monopoly. If a manufacturer of patented pins, or nails, or wood-screws, or any similar article, were to affix to his invoice of sale a condition limiting them to one use, and sell them in quantities to retail dealers to be sold again, he must know and intend that they are to pass into the commerce of the country and be sold over and over again, and sold only to persons who would not buy anything less than an unrestricted title. Shall the purchaser of a packing-box be treated as an infringer, and as pirating an invention, because he uses again and for another purpose the screws or nails which held the box together, and which he purchased when he purchased the box and its contents? May he not reasonably presume with regard to articles of this

description, that pins, and nails, and screws do not go into the market with an incumbrance upon their title or a restriction on their use, and that he is not bound to trace the title to see if it be unrestricted, for the reason that he may well suppose no one would expect to affix a restriction on the use of such articles which would be operative, or, if he could do so, would ever find purchasers of them? The buckles sold by the complainants belong to this class of articles. They are sold for the purpose of being used to confine a bale of cotton, as a nail or screw confines a packing-box. It appears in evidence that when a bale of cotton is sold it is without tare, and consequently the buckle and the strap it confines are sold and resold with the bale of cotton to which they are attached. If the cotton takes fire or is otherwise damaged, and requires to be rebaled, must the owner put the same buckle back on the same bale, or be liable to the penalties of an infringer?

When the cotton bales are opened for use at the factories, the manufacturer who has purchased the ties and buckles with the cotton, having no further use for them, sells them to the junk-dealer. From the junk-dealer the defendants purchase them and repair them and sell them again. The vendor of the patented buckle sells them to be applied to the bales of cotton with the full knowledge that they will be sold and resold as often as the cotton is sold. They impliedly consent to these unrestricted sales. They cannot under such circumstances be fairly considered as retaining the title to the buckles in themselves, or as parting only with such a restricted title as would require each vendor of the cotton to sell it accompanied with a restriction on the title and use of the buckles. The very purpose of the original sale, with the knowledge of the subsequent use and sales necessarily incident, imply a parting with the unrestricted title, and a passing out of the limits of the monopoly of the thing sold, as much as it would if the vendor sold patented thread, nails, or screws, to be used in fastening packing-cases to be sold with the goods packed.

The facts in this case show that the owners of the patent buckle intended and contemplated that the purchasers should

buy an unrestricted title, inconsistent with any reservation of title or use in the original vendors. Such a sale does not fall within the principle as stated in *Hawley v. Mitchell*, but clearly falls within the language and principle of the decisions in *Goodyear v. Beverly Rubber Company*, 1 Cliff., 348, and *Washing Machine Company v. Earle*, 3 Wall., Jr., 320. The case is very different from that of the sale of a machine easily identified, and to which a restriction may easily be attached, or where a license to use only may be sold unaccompanied with any title, or accompanied with a restricted title. But when pins, nails, screws, or buckles are sold, if some of them are sold with a restricted and some with an unrestricted title, there are no means of identification which enable the purchaser, after they have passed into the market and common use, to distinguish the articles licensed or restricted in their use from those absolutely sold. In the case of articles of that description, the patentee may fairly be presumed to have received his royalty when he parted with the possession of the articles and allowed them to go into common and general use. The public should not be vexed with litigation about reserved rights or conditions affixed to the title of such articles, or put upon the investigation of incumbrances or restrictions on the title of nails, screws, buckles or pins, before they can be safely used by a person who has bought them of parties who obtained them of the patentee with the right to sell them in the open market. It is more for the interest of inventors that they should obtain their royalty on such articles when they first put them upon the market, than to make the monopoly odious by the attempt to fix restrictions on the subsequent use.

Bill dismissed, with costs.

S. A. Duncan, for the complainants.

B. F. Thurston, for the defendants.]

Gould v. Ballard.

WILLIAM B. GOULD ET AL.

vs.

GEORGE M. BALLARD ET AL. IN EQUITY.

While enlargement by the use of new instrumentalities is forbidden in a re-issue, restriction by the disuse of some of the old is allowable. *Carver v. Braintree Mfg Co.*, 2 Sto., 432; *Gallahue v. Butterfield*, 6 Fish., 203; and *The Dorsey Harvester-Revolving Rake Co. v. Marsh*, 6 Fish., 387, cited.

The reissued patent No. 7,149, dated May 30th, 1876, for improvement in corner-clamps or protectors for trunks, granted to complainants, the original letters patent having been granted to Edward A. G. Roulstone, *held* invalid for want of novelty.

(Before NIXON, J., District of New Jersey, June, 1878.)

NIXON, J.

This suit is brought against the defendants for infringing reissued letters patent No. 7,149, dated May 30th, 1876, for "improvement in corner clamps or protectors for trunks." The original patent was granted November 6th, 1866, to one Edward A. G. Roulstone, the assignor of the complainants, for "improvement in trunk molding." The defences set up in the answer are: 1. That the reissued letters patent are void, because they include more than was specified in the original, and are inventions and things substantially different. 2. That the invention claimed in the reissue was described in several letters patent anterior to complainants' patent, and was known, and in public use by certain persons therein specified, and hence is void for want of novelty. 3. That they have not infringed, but are making and selling the corner-clamps for trunks, which the complainants allege are an infringement, under and according to letters patent granted to Edward A. G. Roulstone, October 30th, 1866, and reissued May 23d, 1876, and assigned to the defendants, March 23d, 1876.

1. Is the reissue void for including matter not disclosed in the original patent? To determine this question it will be necessary to compare the original with the reissue. *Prima facie*, the latter is for the same invention, and the burden of showing the contrary falls upon the defendants. The only claim in the original reads as follows: "I claim as a new article of manufacture, the corner molding or guard, *a*, for trunks, made of corrugated metal, formed into shape for application, and strengthened by a wire, *b*, substantially as described." The defendants insist that, in view of the state of the art when the patent was issued, such a claim is susceptible of only one construction, to wit, a corner molding or guard strengthened by a wire, and that there is nothing else therein which was not fully disclosed and patented by the same inventor, Roulstone, in Letters Patent No. 27,476, and granted to him as early as March 13, 1860. But it is not always safe or proper in construing a patent to confine attention to the claims. These are sometimes too narrow to embrace the whole invention disclosed in the description and specifications.

In the present case the complainants say that the original patent has two features; one relating to the manner of protecting trunk-corners, and the other to the construction of a trunk-molding, and that this view is fully sustained by the specifications. Turning to the specifications, we find it declared that: "The invention relates to the manner of protecting or re-enforcing the corners of leather and wooden travelling trunks by metal caps or moldings, or the construction of such moldings as articles of manufacture, and consists in a metal molding made into form to cover or project over the three surfaces, meeting at each corner or angle of the trunk, when this molding, so struck up or formed into shape, is made of corrugated metal re-enforced in the horizontal angle by a metal wire." Having thus stated of what his invention consisted, he proceeds to state the good results which would follow its introduction: "Such moldings or corner-pieces applied to the four upper corners of a trunk enable the corners to stand, without damage, the very rough usage to which they are subjected by express and baggage men. Any blow received upon the molding is imparted not directly

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to the trunk, but to the protecting corrugation or corrugations of the metal upon which the blow may happen to fall, thereby preserving the body of the trunk from injury. . . The article thus made into shape, ready for application to trunk-corners without any subsequent shaping or bending, and so as to protect the three surfaces meeting at either angle of the trunk, and presenting, by means of a corrugated surface, obstacles at all points to the direct impact of any body against the surface of the trunk, is of great utility, presenting to manufacturers of travelling trunks a cheap and reliable means of improving and strengthening their productions."

The reissue is dated May 30th, 1876; whether it is for the same invention depends upon the solution of the question whether leaving out certain features described in the original has so changed its character as to render the reissue substantially different. The claims of the latter are: "The corner-clamp A, made with the outwardly-projecting beads, *b*, at the corner, said beads being convex at the outer and concave at the inner side, substantially as herein shown and described. 2. The corner-clamp corrugated substantially as herein described, as a new article of manufacture." There is nothing more here than the original contained, but less. In the reissue the inventor has made no mention of the strengthening-wire nor of the three-winged clamp, which were so fully described in the original. They were omitted by design. The three-winged clamp, because it was found to be anticipated by the patent to H. T. Lee, No. 42,670, and granted May 10th, 1864; and the wire, because it was ascertained to be of no value in protecting the trunk. Not much was left except the guard or clamp, made hollow around the trunk-corners for the purpose of protection, so that, in the words of the original patent, "any blow received upon the molding would be imparted not directly to the trunk, but to the corrugation or corrugations of the metal upon which the blow might happen to fall, thereby preserving the body of the trunk from injury." Are the strengthening-wire and the three-cornered clamp such important particulars of the original patent, that their omission so changes the scope of the invention as to render the reissue void?

In the recent case of *Russell v. Dodge*, 11 Off. Gaz., 151, the Supreme Court exhibited a disposition to criticise the facility with which reissues were obtained at the Patent Office, and held that, where the original patent was for a process of treating bark-tanned lamb or sheep skin by means of a compound in which heated fat liquor was an essential ingredient, and in a reissue a change was made in the original specification by eliminating the necessity of using the fat liquor in a heated condition, and making in the new specification its use in that condition a mere matter of convenience, and by inserting an independent claim for the use of fat liquor in the treatment of leather generally, the character and scope of the invention as originally claimed were so enlarged as to constitute a different invention.

I was inclined to the opinion at the first blush that the case under consideration came within the principle of *Russell v. Dodge*, but after a more careful examination I have come to a different conclusion. The difficulty there was that the changes introduced into the reissue extended and enlarged the operation of the original patent, "bringing under it," as was stated in the opinion of the court, "manufacturers not originally contemplated by the patentee." But here the omission tends to restrict rather than to enlarge; and while enlargement by the use of new instrumentalities is forbidden, restriction by the disuse of some of the old is allowable.

This question was early before the late Mr. Justice Story (*Carver v. Braintree Manufacturing Company*, 2 Story, 432), who held that an inventor was always at liberty in a reissue to omit a part of his original invention, if he deemed it expedient, and to retain that part only which he deemed it fit to retain. To the same effect was the opinion of the late Judge Woodruff of the Second Circuit, in the case of *Gallahue v. Butterfield*, 6 Fish., 214. The patentee in his original patent had a weight co-operating with a spring to give greater efficiency to the spring, and in the reissue he claimed the action of the spring alone. In commenting on this change, the learned judge said: "Nor do I perceive any sound objection to allowing the inventor, in his reissue, to claim the ac-

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tion of the spring alone. It is shown in the record of his patent ; and surely a patentee, whose devices are new, is at liberty to claim each, by way of reissue, although he may have represented and claimed them originally as acting conjointly." In determining the case of *The Dorsey Harvester Rake Company v. Marsh*, 6 Fish., 397, Judge McKennan of this Circuit held that any feature of the invention, which was actually a part of it, that was only suggested or indicated in the specifications or drawings, might be distinctly described in an amended specification and protected by a reissued patent, and, hence, that the claims of a patent might be restricted or enlarged to cover the real invention. "Nor is it any objection to a renewed patent," he adds, "that part of the original invention is omitted. This an inventor may do, because the public may use it, and there is nothing in the policy or terms of the patent act which forbids it."

2. Holding the reissue to be good, notwithstanding these omissions, the inquiry recurs : What is the invention described and sought to be covered by it, and is the same void for want of novelty ?

It is a corner-clamp, made with an outwardly-projecting bead at the corner, the bead being convex at the outer and concave at the inner side. The inventor called it a corner molding or guard in his original description. In the Lee patent it is denominated a metal corner and cap or protecting-cap, but is solid, and not hollow. In the patent issued to Roulstone, March 13th, 1860, and numbered 27,476, the whole trunk, embracing sides, ends, top, and bottom, as well as corners, is made of corrugated-metal plates or outwardly-projecting beads with an exterior convexity and an interior concavity. The object of the invention is the protection of the corners of a trunk, and it is done by the use of corrugated metal. When it is once demonstrated that the entire trunk may be improved and strengthened by covering it with corrugations, is there anything patentable or novel, or does it require invention, to apply to the covers of a wooden trunk substantially the same protection ? The complainant's reissued patent does this and nothing more. The invention lost its distinguishing feature by the omission

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of the strengthening-wire. Every valuable thing left in it is so plainly suggested by the previous patent, to Roulstone, for trunks wholly covered with corrugated metallic plates, that a mechanic would naturally make the application of such corrugated metal to the corners of wooden trunks, without the exercise of more than ordinary skill. This view of the case renders it unnecessary to inquire whether the manufactures of the defendants are an infringement of the patent of the complainants.

The bill must be dismissed with costs.

A. V. Briesen, for the complainants.

E. L. Sherman, for the defendants.

WILLIAM D. ANDREWS ET AL.

vs.

GEORGE B. WRIGHT. IN EQUITY.

Reissued patent Number 4,372, granted to Nelson W. Green, for method of constructing artesian wells, dated May 9th, 1871, held valid.

The invention therein patented was novel.

The invention was patentable and useful.

The invention was not abandoned or dedicated to the public. *Andrews v. Carman*, wherein the same patent was sustained, cited and followed.

(Before NELSON and DILLON, JJ., District of Minnesota, June, 1878.)

NELSON, J.

This suit is brought to recover damages for an infringement of a patent, Reissue No. 4,372, and for an injunction. The defences are: 1. Reissue obtained by fraud, and not for the same invention as the original. 2. Want of novelty, prior discovery and use. 3. Alleged invention for a result or effect, and not patentable. 4. Dedication to the public and abandonment.

The original patent is No. 73,425, and, while the charge

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of fraud in procuring the reissue is not pressed, it is urged that the two instruments are for different inventions. To impeach a reissue, which is *prima facie* evidence that it is for the same invention, it must appear, in the absence of fraud, that the invention described therein is repugnant to the original. *Middletown Tool Company v. Judd*, 3 Fisher, 141. The two patents, on examination, show that they were both granted for "a process of constructing wells," and the claim and specifications describe the process, which consists in driving a tube tightly into the earth until it reaches a water-bearing stratum, without removing the earth upward, and attaching to this well-pit a pump, air-tight, the tube being perforated at the lower extremity and for a short distance upward to admit the water more freely to the inside. The reissue is not different from the original, and the claim does not include anything more than the patentee was entitled to.

Want of novelty.—To sustain this defence testimony of prior discovery and use is introduced, but a close examination and analysis of this evidence does not satisfy my mind of the existence of the drive-wells, before Green put into practical operation his invention. There is no clear and certain testimony that any one had previously conceived the idea of such a process and adapted it to practical use; it is too shadowy and doubtful. Curtis on Patents, Ed. 1849, Secs. 40-48. There is no description of Green's process in any of the publications cited, and the claim is not strenuously pressed. It is evident the results noted therein are obtained by boring or excavating, and not by Green's process, and it is also clear that this process was not used in constructing the salt-wells at Syracuse, New York.

Alleged invention not patentable.—The utility of the invention can not be seriously denied. Its practical use, throughout this and foreign countries, attests this fact. It is a simple and cheap method of obtaining a supply of water, unknown until Green's discovery, and the patent issued is for a process and not a result. Although making a hole in the ground by driving a rod may be a part of the operation Green performs in obtaining a supply of water, his patent describes something more. Before his process, this pit or hole could only be util-

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ized as a well, when by natural forces water flowed into the bottom, and a water-bearing stratum must necessarily be reached where these natural forces will cause a flow of water in such a quantity that the pit becomes a reservoir or produces a stream through the tube as an artesian well. Green, by driving a tube, open at the lower end as described, into the earth, to a water-bearing stratum, with the earth packed tightly about it until the water is reached, and attaching to it a pump, air-tight, constructs a well from which a supply of water is obtained when the pump is worked, and does not rely upon the ordinary operation of natural forces upon the water lying in the earth. The evidence shows that not only an abundant supply of water is thus obtained, but it is inexhaustible.

In *Kneass v. Schuylkill Bank*, 4 Wash., 9, the patented improvement secured and described in the specifications was for copper-plate or copper-plate and type printing on bank-notes, for the purpose of producing a particular effect, viz. : security against counterfeits ; and it was urged that printing with types and copper-plate is not new, but had been long in common use before the invention described, and, therefore, the patent is for an effect. The court said : " This is a mistake ; . . . the patent is not for the effect, but for the kind of printing by which the effect is produced." And the patent was sustained as a process, although the art of printing with copper-plates and letter-press was old. So here, a hole or well-pit is made, but the invention is for a combination of that operation with others described as necessary to construct a drive-well—a process. Green dispenses with digging and boring, and produces a new combination of operation.

Dedication to the public and abandonment.—The facts were reviewed by Judge Benedict in *Andrews v. Carman*, 13 Blatchf., C. C. R., 307, and I concur in his conclusion, that they do not amount to a dedication, or sustain the defence of abandonment.

Decree for complainants is ordered, and a reference to a master to ascertain damages.

George Gifford, John Y. Page and Lamprey & Jones, for the complainants.

Davis O'Brien Wilson, for the defendant.

Terry Clock Co. v. New Haven Clock Co.

THE TERRY CLOCK COMPANY

v/s.

THE NEW HAVEN CLOCK COMPANY. IN EQUITY.

The patent granted to Silas B. Terry, assignor of the complainant, dated December 1st, 1868, for a new manner of constructing the pallets of clock-escapements, construed by the court, and upon the construction given, *held*, that the patent is broader than the invention, and that the invention as claimed has been anticipated.

(Before SHIPMAN, J., District of Connecticut, June, 1878.)

SHIPMAN, J.

This is a bill in equity to restrain an alleged infringement of letters patent which were granted to Silas B. Terry, the assignor of the plaintiff, on December 1st, 1868, for a new manner of constructing the pallets of clock-escapements. The answer denies that the patentee was the original inventor of the improvement which is described and claimed in the letters patent. An amendment of the answer sets up another defence, which it is not important now to consider.

Prior to the date of the Terry invention, escapements constructed with pallets to regulate clock-work movements were well known. One well-known class was called a "recoil-escapement" and another class was called a "dead-beat escapement." Dead-beat verges were generally made by pressing from solid steel. Recoil verges were made by bending from flattened steel. The patentee constructed a combined recoil and dead-beat escapement, and in the specification of his patent described this part of his invention as follows: "This invention relates to a new manner of constructing the pallets of a clock-escapement, . . . and consists in a novel construction of the pallets of a combined recoil and dead-beat anchor-escapement, of which one is turned outward and the other inward, with a view of allowing the

motive power of the wheel to aid the weight of the pendulum to overcome its momentum. . . . I prefer to have the whole escapement made of one piece of flattened steel, as shown.

The pallet D is bent almost radially to the centre E of the escapement-wheel F, and has a bent-in flange, *d*, which has a rounded outer face, as shown, so as to allow the teeth of the wheel to easily act upon the pallet.

The other pallet, E, is bent outward, as shown, and the teeth of the wheel should be somewhat rounded or bevelled to act easy on the pallet E.

The operation of the escapement will easily be understood. During the oscillation of the verge-shaft, the pallets will alternately arrest the teeth of the wheel, so as to bring the same to a dead stop, the pallet E causing a recoil of the wheel. But at the moment when the momentum of the pendulum is being overcome by the weight of the same, the motive power, acting upon the same, will materially aid the weight of the pendulum, as the teeth of the wheel can then easily act upon the inclined respective outer and inner faces of both pallets D and E. It will be noticed that this is a combined recoil and dead-beat escapement, the pallet D arresting the motion of the wheel while the pallet E produces a recoil of the wheel by the vibration of the escapement. In this manner I have succeeded in obtaining a perfect regularity of motion and a full control over an unevenly-operating spring."

The claim was as follows: "The anchor-escapement, constructed as described, with one pallet, D, having a flange, *d*, and the other pallet, E, bent out, whereby one pallet is made dead-beat and the other recoil, for the purpose of equalizing the vibrations of larger or smaller pendulums produced by unequal motive power, as herein shown and described."

The plaintiff makes its patented escapement entirely by bending from flattened steel. The defendant largely uses the patented invention, and manufactures by bending. A combined dead beat and recoil verge is a decided improvement in the manufacture of cheap clocks.

It was clearly proved that S. N. Botsford, of Whitneyville, Connecticut, made and sold between 1853 and 1858 many thousands of clocks which had combined dead-beat and recoil

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anchor escapements, made by pressing from solid steel. These escapements did not differ in the shape of the working-surfaces, or in operation, or in construction from the Terry escapements in any manner, except that the former were shaped by pressing out of solid steel instead of being formed and shaped by bending out of a piece of flattened steel. The defendant offered evidence to show that Botsford, during the first part of the time between 1853 and 1858, was in the habit of making for use and sale the same combined bent escapement. The plaintiff offered evidence to show that such manufacture, if it existed, was merely experimental. In the view which I take of the case it is not necessary to find whether or not the defendant affirmatively established the fact of such manufacture for sale.

It was established to my satisfaction that the bent verges were cheaper, and that they were more easily made perfect, than solid verges. Under this state of facts the question of novelty becomes one of construction of the patent. If the patent is limited to a bent verge, the invention has not been proved to have been anticipated, and the patent has been infringed. If the patent is for the peculiarly-shaped and described combined dead-beat and recoil escapement, it is devoid of novelty. In the latter case the patent is broader than the invention.

Upon the construction of the patent :

First. The claim does not, upon its face, show that the claimed invention was a peculiarity in the mechanical means by which the escapement was formed or shaped. The claim is for " the anchor-escapement, constructed as described, with one pallet, D, having a flange, *d*, and the other pallet, E, bent out, whereby one pallet is made dead-beat and the other recoil." The apparent invention which is included in the claim is the combined dead-beat and recoil escapement, in which the different parts of the escapement are shaped as described ; and unless the specification shows that the construction is necessarily to be by bending, and that the term " bent out " is used in its mechanical signification, and is not equivalent to curved or crooked, the claim would naturally be construed to be a claim for the peculiarly-shaped combined recoil and dead-beat escapement.

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Second. In the descriptive part of the specification the phrases "turned outward," "bent almost radially," and "bent-in flange" are used; but there is nothing in the specification which shows that the hinge of the invention is a bent verge, as distinguished from a solid verge of precisely the same shape. If such a distinction had been in the mind of the patentee, it would naturally be found in the patent, and it would not only be found but it would have been made prominent. It now appears that the invention consisted in the construction of an old verge by bending the pallets instead of by pressing them into shape by dies. If the patentee was of that opinion when the specification was drawn, it is unaccountable that the precise character of his invention should have been so dimly shadowed forth. If he knew that the secret which he had found out was not the combination made with a flange, as described, but a peculiarity in the method of producing an old combination, it was his duty to have distinctly announced to the public the true nature and extent of the invention which he had made. He was required by the statute to "particularly specify and point out the part, improvement, or combination which he claims as his own invention or discovery." If the patentee knew of what he was the actual first inventor, he did not comply with the statute. If he supposed that he was the first inventor of a peculiarly-shaped combined recoil and dead-beat verge, the language which he used was in accordance with such supposition, and is the language which would naturally have been used. There is no evidence of any fraudulent or deceptive intent on the part of the patentee.

Third. A broad construction of the patent is supported by its history, which shows that the patentee in fact claimed to be the inventor of the peculiarly-shaped combination. The application was rejected, the Examiner saying that the combination was "no more patentable than the combination of a gilt and steel hand to indicate the time." In reply, the patentee—after stating that in common anchor-escapements both the dead-beat and recoil verges are deficient; that the action of the dead-beat verge upon the pendulum in large and small arcs of vibration causes large vibrations to be slower

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and small vibrations to be faster than the mean between the two, and that the action of the recoil-escapement upon the pendulum has an opposite effect to that produced by the dead-beat, says :

"I have invented or discovered, after more than forty years' experience in these matters, that a verge can be made with one pallet dead-beat and the other to recoil to such a degree that the vibrations of the pendulum shall be equalized, whether large or small, when produced by an unequal motive power. Such is the verge for which I ask a patent in claim first. It is entirely unlike any other verge in its essential features, as any one can see by comparing it with the remarks above made. To the common eye it might not be noticed ; but to a man versed in these matters I think it will be seen at once, and seen as a matter of the utmost consequence. Verges that are bent for common clocks are never bent like the model, but always as seen in the common. [Sample given]. This is entirely new in its form of being bent or shaped to produce a dead-beat pallet. I do not believe anything has ever been made to accomplish the same purpose. New results are produced by making the vibrations equal. It is a matter that can be seen, and is of great consequence, and is, therefore, in my opinion, patentable."

This quotation shows that the patentee placed the stress of his invention upon the combination as constructed, and not upon any peculiarity in the method by which the peculiar combination was formed and shaped from metal. He declares that he has discovered a way of equalizing the vibrations of the pendulum, which method is by making one pallet of the verge dead-beat and of a specified form, and the other recoil to a certain degree. This peculiar construction, it is now conceded, was old. But the manufacture of this peculiarly-constructed combination from sheet metal was novel. The peculiarity in which it is conceded that this invention consisted was not particularly pointed out or specified. The argument convinced the Patent Office, and the patent was issued.

It follows that the patent is broader than the invention,

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and that the invention as claimed had been anticipated by Mr. Botsford.

Let there be a decree dismissing the bill, with costs.

Charles W. Gillette and *Charles E. Mitchell*, for the complainant.

John S. Beach, for the defendant.

WILLIAM C. BARKER

vs. .

DELORAINE F. STOWE. IN EQUITY.*

The claims of the reissued letters patent granted to William C. Barker, July 6th, 1875, for an "improvement in buckets for chain-pumps" (the original letters patent having been issued to said Barker June 20th, 1871, and reissued to him May 19th, 1874), namely, "(1.) An elastic bucket for chain-pumps, adapted to fit and work in the bore of a pump tube, to raise the water by suction, provided with a suitable orifice or outlet through which the water remaining in the pump-tube above the bucket is allowed to escape down to the source of supply, substantially as and for the purpose set forth; (2) A solid elastic bucket, having an elastic bearing edge, and its upper portion convex or contracted from said edge, whereby the bucket will readily yield to any irregularities in the pump-tube, and admit of its being easily drawn up, while at the same time it will resist moving downward, substantially as and for the purpose specified," are infringed by the buckets for chain-pumps described in the letters patent granted to Deloraine F. Stowe, February 23d, 1875, for an "improvement in buckets for chain-pumps."

Mere applications for patents cannot be considered on the question of novelty, as a defence in a suit on a patent. To make the things described and shown in them available, there must be evidence that such things were actually constructed in working form.

The two claims of said reissued letters patent are void for want of novelty.

In the proofs, W. gave evidence as to prior knowledge and use by him of the thing patented. His name and such fact were not set up in the

* 15 Blatchf. C. C. R., 49.

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answer. On the taking of the proofs the plaintiff objected to such evidence of W. "as incompetent under the rules of the Court" and as "incompetent under the laws and rules governing practice in the Circuit Courts of the United States." At the hearing the plaintiff sought to exclude the evidence of W. because his name and the facts of his prior knowledge and use were not set up in the answer: *Held*, that the objection was waived because it was not distinctly made when the evidence was taken.

(Before BLATCHFORD, J., Northern District of New York, July, 1878.)

BLATCHFORD, J.

This suit is brought on reissued letters patent granted to the plaintiff July 6th, 1875, for an "improvement in buckets for chain-pumps," the original letters patent having been issued to the plaintiff June 20th, 1871, and having been reissued to him May 19th, 1874. The specification says: "Prior to my invention there was not, so far as I am aware, in use an elastic bucket provided with a means whereby the water remaining above the bucket could escape back into the well when the pump was not in use. The great difficulty heretofore experienced in that class of pumps where the water is drawn up by an elastic bucket tightly fitting the bore of the tube, has been the continued freezing in cold weather of the water remaining in the pump-tube when the pump was not in operation, which, in many cases, would split or otherwise injure the wooden tube and the working parts of the pump, to an extent that would render the same wholly worthless. To remedy this evil is the principal object of my invention; and it, therefore, consists in providing the bucket with a suitable outlet or opening, through which the water is allowed to escape from the pump-tube down to the source of supply, when the pump is not in use. My invention also consists of a solid bucket of india rubber or other similarly elastic material, convex or contracted upward from that part of its outer periphery which comes in contact with the interior of the pump-tube, by which I am enabled to present an elastic edge or bearing that will readily yield to any irregularities or slight differences in the interior diameter of the pump-tube, and admit of its being easily drawn up, while, at the same time, it will resist moving downward." The specification states, that the largest

circumference of the bucket is somewhat greater than the bore of the pump-tube; that the bucket is convex or contracted upward from that part of its outer periphery which comes in contact with the interior of the pump-tube, thereby forming an elastic edge or bearing surface, that will yield sufficiently to be easily drawn through the tube, while, at the same time, if by any accident the operator releases his hold of the crank over which the chain runs, the bucket will not drop in the tube, but will remain where the accident left it, or, in other words, the shape or form described, together with the fact that its largest circumference is at that point where it comes in contact with the interior of the pump-tube, will readily allow it to be drawn upward, and prevent its being drawn downward, or forced in the latter direction, by the weight of water above it; and that it provides the bucket with an aperture or suitable outlet, so that, when the bucket is stationary, the water remaining above it is allowed to escape back into the well or source of supply, thereby preventing the possibility of the water freezing in the tube and splitting or otherwise injuring the same. The specification then sets forth the arrangement of a button or washer and loop link, to which the bucket is attached, to make it operative with the chain. It then adds: "I am aware that elastic buckets composed of a hollow sphere are not new, and I am also aware that it is not new to provide metal pail buckets with an opening, so that, when standing, any water remaining in them will be allowed to escape, for the purpose of insuring a fresh supply of water from the well when the buckets are raised. I do not, therefore, claim such construction of buckets." The first two claims of the patent are as follows: "1. An elastic bucket for chain-pumps, adapted to fit and work in the bore of a pump-tube, to raise the water by suction, provided with a suitable orifice or outlet through which the water remaining in the pump-tube above the bucket is allowed to escape down to the source of supply, substantially as and for the purpose set forth. 2. A solid elastic bucket, having an elastic bearing edge, and its upper portion convex or contracted from said edge, whereby the bucket will readily yield to any irregularities in the pump-tube, and admit of its being easily

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drawn up, while, at the same time, it will resist moving downward, substantially as and for the purpose specified." There are four figures of drawings accompanying, and referred to in the specification. Figure 1 is a perspective view of the improved bucket, with its loop and button. Figure 2 is a plan view of the button. Figure 3 is a plan of the loop before insertion through the bucket and button. Figure 4 is a vertical section of the bucket, in position for use. The aperture or outlet for the water above the bucket is shown in the drawings as a perpendicular cylindrical passage through the body of the bucket, commencing in the outer curved surface of the bucket, which is shown as a hemisphere, at a point about one-third of the way from the highest point of the curve to its lowest point, the passage being parallel to the upright parts of the link which passes through the bucket. The passage is continued through the button or washer, which is held up against the horizontal face of the bucket by the turned up lower ends of the loop link.

The defendant has made and sold buckets for chain-pumps described in letters patent granted to him February 23d, 1875, for an "improvement in buckets for chain-pumps." He has an india rubber shell, of a cylindro-conical form, that is, a small portion of the shell extending upwards from the outer lower circular edge is cylindrical, and fits the bore of the pump-tube, and the portion above the cylindrical portion is conical in form, receding upwards from the bore of the pump-tube, and has a hole through its apex. The bottom side of the shell is bevelled inwardly from a circle concentric with the circle forming the outer lower edge, and a short distance inward from it, the bevel extending to the inner surface of the shell. Thus provision is made for inserting in the shell a solid conical metal core, which is closely embraced by the inner surface of the shell, above the inner termination of the bevel, while the free part of the shell below the inner termination of the bevel forms a highly elastic skirting, which accommodates itself closely to the bore of the pump-tube. The skirting is formed substantially of the cylindrical part of the shell. The metal cone has an eye on each end, to attach the bucket to the chain links, and

a small up and down passage is made through the skirting, to allow the water in the pump-barrel to pass down when the pump is not in operation. The patent claims the chain-pump bucket described, having the cylindro-conical elastic shell fitted to the solid cone, substantially as and for the purpose set forth.

It is contended by the defendant, that matter is found in the reissue which is not in the original patent of 1871. The drawings are identical, and there is nothing either in the specification or the claims of the reissue which is not justified by what is found in the description or drawings of the original patent.

The defendant's bucket infringes claims one and two of the plaintiff's patent. It is an elastic bucket for a chain-pump. It is adapted to fit and work in the bore of a pump-tube, to raise water by suction. It is provided with a suitable orifice or outlet, through which the water remaining in the pump-tube above the bucket is allowed to escape down to the source of supply. The fact that, in the defendant's bucket, the passage for the drip of the water is through the skirting outside of the metal core, or is a notch in the outer edge of the skirting, and thus will drain off more of the water than will be drained in the construction shown in the plaintiff's drawing, does not relieve the defendant's bucket from being an infringement of the first claim of the plaintiff's patent. Nor does the fact that a narrow ring of water below the upper end of the passage way in the plaintiff's bucket may remain between the outer surface of the bucket and the inner surface of the pump-tube, affect the validity of the plaintiff's patent. His object was to get rid of the column of water above the tightly fitting bucket, and he accomplishes that result substantially. It is not shown that, in fact, actual difficulty has resulted from the freezing of the narrow ring of water left in the plaintiff's construction, and, if that had been shown, the cutting of the passage way nearer to the inner surface of the pump-tube is an obvious suggestion, not involving invention, and within the scope of the plaintiff's construction, and to which he is entitled as the result of the practical working of his apparatus. The defendant's bucket is a solid elastic bucket, having an elastic bearing edge,

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in all the practical respects in which the plaintiff's bucket is a solid elastic bucket having an elastic bearing edge. The defendant's bucket has an elastic bearing edge in the cylindrical part of the india rubber shell, and the conical upper part of the shell is contracted from said edge, so that the bucket readily yields to any irregularities in the pump-tube, and can be easily drawn up, while it resists downward movement. It does not affect the validity of the plaintiff's patent or the question of infringement, that, in practice, the plaintiff's bucket may be used with a ratchet to counteract the downward movement of the bucket induced by the weight of the column of water in the pump-tube, or that, in practice, the defendant's bucket may be used with such ratchet. In each, the tendency and operation of the bearing edge, when the bucket is left free to descend with the pressure on it of a column of water above it, are, to resist and retard the downward movement.

The plaintiff's patent is attacked for want of novelty. The defendant offered in evidence, under objection from the plaintiff that they were incompetent, five several applications for patents, filed in the Patent Office—Edwin Gilbert, filed February 10th, 1849, rejected May 21st, 1849; A. G. Babcock, filed September 20th, 1851; J. Powers, filed January 26th, 1852; C. F. Baragar, filed June 30th, 1859; and Orin O. Witherell, filed November 10th, 1866. The defendant also put in evidence letters patent granted to Clark Polley, December 14th, 1852; to Edmund Morris, January 23d, 1855; to Arcalous Wyckoff, April 3d, 1855; to Birdsill Holly, July 14th, 1857; to John D. Clark, December 23d, 1862; and to Emmet R. Austin, October 2d, 1866.

Mere applications for patents cannot be considered on the question of novelty. To make the things described and shown in them available, there must be evidence that such things were actually constructed in working form.

The patent to Polley shows a ball bucket, with no bearing edge and no provision for drip. The patent to Morris shows a ring with no bearing edge and no drip hole. Wyckoff's patent shows no bearing edge and no drip hole. While Holly's pump has an escape for the surplus water, his

arrangement is different from that of the plaintiff, and he has not an elastic bucket with a bearing edge, nor has he a water escape through an elastic bucket. Clark's patent shows no bearing edge and no water escape. Austin's patent shows no suction pump and no pump-tube.

I find among the papers a patent granted to Orin O. Witherell, October 13th, 1868. It is not mentioned in the answer, nor can I find that it was introduced in evidence. If it is to be considered, it has no bearing edge and no water escape.

Orin O. Witherell, the same person mentioned above, has given evidence as to pump buckets constructed by him prior to the plaintiff's invention. He introduces an Exhibit, A, as representing a form of bucket which he made and sold for five months, in the year 1866. It has a thin india rubber disc placed loosely above a metal disc, and the edge of the rubber disc forms a flange, which extends downward and embraces part of the depth of the metal disc. The rubber disc has a hole in the centre, through which a metal eye, fastened to the upper part of the metal disc, passes. He testifies, that the settling down of the chain, when the pumping was stopped, allowed the water above to escape through the hole in the centre of the rubber disc. His application of November 10th, 1866, and his patent of October 13th, 1868, showed no device such as is shown in Exhibit A. They showed only a rubber or elastic plate, clamped tightly between two metal plates, and thus expanded to fit the pump-tube. Witherell testifies, that he put the buckets like Exhibit A, particularly into worn pump-tubes, which had had only the metal plate buckets; that, between April and August, 1866, he put buckets like Exhibit A into between 50 and 100 wells, mostly in the southeastern part of New Hampshire; that he saw one of such pumps in successful operation with them, as late as 1869; that he never used less than three of such buckets for a well, and seldom more of them; that he never knew any of them to freeze; that the back motion of the chain, after pumping was stopped, was sufficient, even when a ratchet was used, to open a central space between the rubber and the metal plate, the rubber adhering to the sides of the pump-tube, and allowing the water to escape down through

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the centre ; that he used the buckets like Exhibit A for the purpose of fitting closely in the tube, so as to cause suction ; and that he generally succeeded in establishing a suction, unless the tube was too much worn or defective. There is no testimony in contradiction of this, or throwing doubt upon the truth of the facts testified to by Witherell, or showing that buckets like Exhibit A would not operate as he testifies. Exhibit A shows an elastic bucket for a chain-pump, adapted to fit and work in the bore of a pump-tube, to raise water by suction, and provided with a suitable orifice or outlet through which the water remaining in the pump-tube, above the bucket, can escape down to the source of supply. The fact that Witherell made no mention of a structure like Exhibit A in his subsequent application or patent, cannot have the effect, in the present case, to destroy the force of his affirmative direct testimony. Nor can what he did in respect to buckets like Exhibit A be regarded as an abandoned experiment. It appears to have been a successful, practical, working apparatus. If it was an elastic suction bucket, with a drip, it is of no consequence whether Witherell devised it primarily with a view to the drip, or not. Nor is it of any consequence that the hole for the link served also as a drip hole. If it allowed the water to escape, it would do so as effectually as the extra passage in the plaintiff's bucket. It may be, perhaps, that the plaintiff is entitled to some claim in respect to a drip orifice in an elastic suction bucket, but, in view of the Witherell Exhibit A, the first claim of the plaintiff's patent is too broad, and is invalid.

The record states that the plaintiff objected to the testimony of Witherell, so far as it endeavors to set up prior knowledge, manufacture or use of the devices claimed by the plaintiff as his invention, "as incompetent under the rules of the court." Again, the record states that the plaintiff objected to the reception of the testimony of Witherell, on the ground that the witness is "incompetent under the laws and rules governing practice in the Circuit Courts of the United States." At the hearing, the plaintiff took the objection that the evidence of Witherell, as to prior knowledge and use, could not be admitted, because the name of Witherell, and

the fact of prior knowledge and use by him, were not set up in the answer. The only objection taken on the face of the record is found in what is above referred to. I do not think that is sufficient to direct the attention of the defendant to the point that the objection was based on the omission of the name of Witherell from the answer. An objection of that kind may be waived, and it is waived unless it is distinctly made. The time to make it is when the evidence is taken, and not first at the hearing. Otherwise, the defendant is taken by surprise. The fact that the defendant took the evidence shows that he intended to rely on it, and if he had been distinctly notified on the record that the plaintiff intended to rely on an objection that Witherell was not named in the answer as having prior knowledge, it is to be presumed he would have taken steps to apply for leave to amend his answer.

Witherell also introduced, in his evidence, another form of bucket made by him, Exhibit B. He testifies that he made and sold buckets like Exhibit B, after he made them like Exhibit A, and from the fall of 1866 until the fall of 1873. Exhibit B has a rubber disc compressed between two metal plates by a screw and a nut. By lubricating with oil the iron washer on the lower face of the disc, the lower part of the disc was caused to expand more than the upper part, so as to give to the lower part a bearing edge, with the part above it receding from it inwards. Exhibit B shows such construction. He says that he never used less than three of Exhibit B for a set, and seldom more; that his practice was to have the bucket fit as closely as possible, and not have the pump work too hard; that the object of the bevelled edge was to have the rubber slide easily over any roughness in the tube; that the bucket operated both by lifting and suction; that, when the bucket fitted closely, it resisted the downward run of the chain; that he set them close enough, by expansion, to draw the water up readily, and yet leave room for the water to pass back on the inside of the tube; that the water in the tube, with Exhibit B, never froze, when the bucket was properly adjusted; that he made a considerable number with the bearing edge like Exhibit B; and that he used that form in

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tubes that were too large to be filled by expanding the disc equally from both of its faces. This Exhibit B is a solid, elastic bucket, having an elastic bearing edge, and its upper portion convex from said edge, whereby the bucket will readily yield to any irregularities in the pump-tube, and admit of its being easily drawn up, while, at the same time, it will resist moving downward. It answers exactly the second claim of the plaintiff's patent. A provision for the escape of the water is no part of the second claim, and the elastic bearing edge is no part of the first claim. Although Exhibit A has no elastic bearing edge, it anticipates the first claim; and although Exhibit B has no water escape, it anticipates the second claim.

The bill must be dismissed, with costs, and a like decree must be entered in the suit against Newhall.

George E. Buckley, for the complainant.

Walter L. Dailey, for the defendant.

 SUSAN HAMILTON

vs.

GILBERT J. KINGSBURY ET AL. IN EQUITY.*

By a license under letters patent H. granted to L. and to his "legal representatives" "the full and exclusive right to use and to sell to be used" the invention, as applied to a specified construction, "as secured by the said letters patent, for, to and in the State of New York, I excepting and reserving the right to manufacture the said invention for myself and legal representatives:" *Held*, that by the license, L. acquired the right to manufacture the invention for such sale or use, and that the license was assignable by L.

(Before BLATCHFORD, J., Northern District of New York, July, 1878.)

* 15 Blatchf. C. C. R., 64.

Hamilton v. Kingsbury.

BLATCHFORD, J.

This suit is founded on letters patent of the United States granted to Palmer Hamilton December 5th, 1865, for "improvements in saw-mills," of which the plaintiff claims to be the owner. The defendants interpose a plea to the bill. The matters set up in the plea are as follows; Palmer Hamilton, on the 1st of August, 1866, assigned to Milton A. Hamilton all the right, title and interest of Palmer Hamilton in the invention covered by the patent "as it is or may be applied to mulay or single upright mill-saws," for the whole of the United States. Milton A. Hamilton, on the 27th of August, 1866, assigned to Clinton A. Lombard and John Thompson, "and to their legal representatives," for the consideration of \$3,000, "the full and exclusive right to use and to sell to be used the said saw-hangings" (the invention being previously in the assignment stated to be known as "Hamilton's oscillating and reciprocating saw-hangings"), "as they are or may be applied to mulay or single upright mill-saws, as secured by the said letters patent, for and in the State of New York, I excepting and reserving the right to manufacture the said invention for myself and legal representatives." Lombard and Thompson, on the 29th of April, 1868, for the consideration of \$10,000, assigned to Robert P. Russell, Montgomery Reese and the firm of Strong & Woodbury, in equal shares of one-third each, all the right, title and interest of Lombard and Thompson in the invention patented, for, to and in the State of New York. Reese, on the 15th of July, 1868, in consideration of \$1,200, assigned to Russell and the firm of Strong & Woodbury, in equal shares of one-half to each, all the right, title and interest of Reese in the invention patented, for, to and in the State of New York. Strong & Woodbury, on the 10th of December, 1869, in consideration of \$1,000, assigned to the defendants all the right, title and interest of Strong & Woodbury in the invention patented, for the State of New York, except the counties of Cayuga and Franklin. The defendants did not make or sell any machine containing the patented invention, prior to the assignment from Strong & Woodbury to them, except that, within a year prior to that time, they made for Strong & Woodbury, and at their re-

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quest, a small number of said machines, and, since said assignment, they have not made, used or sold any machine containing said invention, except that they have made and sold mulay and single upright mill-saws containing said invention, within the State of New York other than in the counties of Cayuga and Franklin in that State. The bill sets up an assignment by Palmer Hamilton to Milton A. Hamilton, on the 1st of August, 1866, of the entire patent, and an assignment by Milton A. Hamilton to Palmer Hamilton, on the 12th of March, 1867, of the entire patent, and an assignment by Palmer Hamilton to the plaintiff, on the 18th of April, 1873, of the entire patent. The plea alleges that the assignment set up in the bill from Milton A. Hamilton to Palmer Hamilton was not recorded in the Patent Office until after the time when the defendants made the purchase from Strong & Woodbury, and received from them the said assignment; that the defendants had no notice of such assignment from Milton A. Hamilton to Palmer Hamilton until after this suit was brought; and that they made the purchase from Strong & Woodbury and received from them said assignment, and paid them therefor in good faith the consideration of \$1,000 therein expressed, without any knowledge or notice that any such assignment as that from Milton A. Hamilton, above mentioned, then or ever existed, and in the full belief that the said assignment from Strong & Woodbury gave to them a perfect title to such interest in the patent as it purported to convey. The bill alleges that the defendants, in violation of the rights conferred by the patent, and in infringement thereof, have made and sold, without the license of Palmer Hamilton, or Milton A. Hamilton, or the plaintiff, large numbers of machines containing the patented invention, and have cut large amounts of lumber with such machines, and have realized large profits from such infringement. It also alleges that the plaintiff is the owner, by assignment, of all the rights of action for infringement of the patent which accrued to either Palmer Hamilton or Milton A. Hamilton. The plea alleges that the assignment from Milton A. Hamilton to Lombard and Thompson was recorded in the Patent Office on the 22d of October, 1866, that the assignment from Lom-

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bard and Thompson was recorded in the Patent Office on the 7th of August, 1868, and that the assignment from Reese, was recorded in the Patent Office on the 7th of August, 1868.

It is contended for the defendants, on the hearing on the bill and plea, that the assignment from Milton A. Hamilton to Lombard and Thompson gave to the latter the exclusive right to use and sell to be used the saw-hangings, as applied to mulay or single upright mill-saws, within the State of New York, and the right to manufacture the same for such use or sale, in common with a right to manufacture the same, reserved to said Milton A. Hamilton. For the plaintiff, it is contended, that, by the assignment to Lombard and Thompson, the privilege granted to them is limited to the right to use and sell, and that Milton A. Hamilton expressly reserved to himself the right to manufacture.

The language of the assignment to Lombard and Thompson is inartificial and awkward, but the meaning of it is, I think, clear. The grantor, having the right to the patent for the whole of the United States, for its application to mulay or single upright mill-saws, that is, the exclusive right, for the whole of the United States, to make, use and sell saw-hangings according to the patent, as applied to mulay or single upright mill-saws, conveys to Lombard and Thompson, for \$3,000, the exclusive right to use and sell saw-hangings according to the patent, as applied to mulay or single upright mill-saws, for and in the State of New York, and excepts and reserves to himself the right to manufacture the patented invention. He conveys the exclusive right to use and sell in the State of New York. He does not convey the exclusive right to make in that State, because he reserves the privilege of making, himself, in that State. He retains the exclusive right to use and sell in other States, and the privilege of making in the State of New York for use and sale in other States is desirable to him. He does not except and reserve the exclusive right to make in the State of New York, but merely a right to make. On all proper rules of construction, the exception and reservation must be held to be an exception and reservation of something, which, but for such exception and reservation, would pass, by the granting part,

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to the grantee. A right to use and sell, and, especially, an exclusive right to use and sell, for which \$3,000 is paid, would be practically valueless if no machines to use or sell could be obtained except by some further agreement with the grantor, who retained the exclusive right to make. The construction contended for by the plaintiff requires that the exception and reservation should be read as if it excepted and reserved the "exclusive" right to manufacture. It does not. In view of the fact that there can be no use or sale of a machine unless it can be made, it is a violent wresting of language to construe the exception as one of an exclusive right to make, as compared with a construction which makes the grant one of an exclusive right to make, use and sell, reserving to the grantor a right to make. The effect of such a grant, coupled with the reservation, is to grant an exclusive right to use and sell, and a right to make, and to reserve a right to make in common with the right of the grantee to make, the grantor not retaining any right to use or sell in the State of New York, and the grantee not acquiring any right to use or sell, out of the State of New York, any machines made by him in that State. If the granting clause be held to cover nothing but the right to use and sell, the reservation clause is of no force. The instrument, on such view, would have the same effect without the reservation clause as with it. It is plain that the grantor regarded the granting clause as bearing the interpretation that it would carry the right to make, and that, because of the use of the word "exclusive," it might be held to be an exclusive right to make, as well as an exclusive right to use and sell; and that, desiring to reserve a right to make, and to grant a right to make, the language used was used, the effect being to leave the right to make in the State of New York exclusive in the grantee and the grantor in common, and the right to use and sell exclusive in the grantee. This interpretation is the only one which gives effect to all the words found in the instrument. *Woodworth v. Curtis*, 2 Woodb. & M., 524.

The assignment is to Lombard and Thompson, "and to their legal representatives," to be held and enjoyed by them for their own use and behoof, "and for the use and behoof

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of their legal representatives." It is contended, for the plaintiff, that the instrument conveyed a mere personal license to Lombard and Thompson, and that it did not authorize them to assign their right. I think otherwise. The words "legal representatives" must be held to mean "assigns," as well as "executors and administrators." It certainly means something. If it means "executors and administrators" and not "assigns," the instrument ceases to be a personal license. But it is fair to suppose that both grantor and grantees understood that, for \$3,000, the grant was to be assignable, and that the parties understood, by "legal representatives," those who would legally represent the grantees by a legal and valid voluntary transfer from them, equally with those who would represent them by a legal and valid involuntary transfer. Especially is this so when we find that the grantor, in the reservation clause, excepts and reserves the right to manufacture, "for myself and legal representatives." He not only could not have intended to cut himself off from the right to assign the reserved right to make, but he must have contemplated that, in there using the words "legal representatives," he included assignees.

The plea does not admit the doing, by the defendants, of anything which it can, on the bill and the plea, be held it was unlawful for them to do, and the plea must be allowed, with costs to the defendants, with liberty to the plaintiff to move, on notice, within thirty days after service of a copy of the order to be entered hereon, for leave to amend his bill, under Rule 35 in equity, and, in default thereof, the bill must be dismissed, with costs.

William H. Bright, for the complainant.

Henry R. Selden, for the defendants.

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OLIVER S. GARRETSON

vs.

CHARLES B. CLARK ET AL. IN EQUITY.*

In a suit in equity on two letters patent, each for an "improved mop-head," an interlocutory decree for profits and damages was made. The plaintiff, before the master, put in no evidence, except evidence to show the damages to the plaintiff and the profits to the defendant, in the manufacture of the infringing mop as a whole. At the close of the plaintiff's evidence, the defendant moved to dismiss the proceedings, on the ground that no basis had been laid before the master to compute or estimate the plaintiff's damages, and that he was entitled to only nominal damages. The point was reserved and the defendant put in evidence on the basis assumed by the plaintiff. The master reported, that, as no evidence had been given before him of damages resulting to the plaintiff, or of profits accruing to the defendant, from making and selling the patented improvements as distinguished from the whole mop, he found for the plaintiff nominal damages only: *Held*, that the master's report was correct.

The patentee must, in every case, give evidence tending to separate or apportion the defendant's profits and the patentee's damages, between the patented feature and the unpatented features, and such evidence must be reliable and tangible, and not conjectural or speculative; or he must show, by equally reliable and satisfactory evidence, that the profits and damages are to be calculated on the whole machine, for the reason that the entire value of the whole machine, as a marketable article, is properly and legally attributable to the patented feature.

Exceptions by the plaintiff to the master's report, founded on the admission of testimony objected to, held to be immaterial, because, the plaintiff having failed to give adequate evidence as to profits and damages, the defendants were not put on their defence in that respect, and it was unimportant whether they gave competent evidence or no evidence.

Certain exceptions overruled, as too general.

The plaintiff not allowed to give further evidence, there being no claim of a failure, through inadvertence, to give other or further evidence, or that there was any which could be given.

* 15 Blatchf. C. C. R., 70.

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Costs awarded to the plaintiff, except the costs of the reference, and report, and exceptions, and the hearing thereon.

(Before BLATCHFORD, J., Northern District of New York, July, 1878.)

BLATCHFORD, J.

The bill in this case is founded on two patents. One of them was granted to Charles B. Clark and Oliver S. Garretson, May 22d, 1866, for an "improved mop-head." The specification states that the invention consists (1.) "in the combination of a collar provided with wings, or their equivalent, which carry the movable jaw, and an adjusting nut with which it is connected by means of a flange and lugs, with a threaded shank and fixed cross-head;" and (2.) "in the manner of connecting the wire-frame, which constitutes the movable jaw, with the arms of the collar." The patent has two claims: (1.) Connecting the nut with the collar which carries the movable jaw, by means of the lugs, or their equivalents, in combination with the threaded shank of the fixed jaw, arranged and operating substantially as set forth. (2.) Connecting the movable jaw with the collar by means of the bows, constructed and operating substantially in the manner and for the purposes specified. The other patent was granted to Oliver S. Garretson, August 13th, 1867, for an "improved mop-head." The specification states that the invention consists "in constructing that part of the loose jaw that forms the collar in two parts or halves, with the inner surfaces properly grooved to receive and retain the flange or wings of the nut, and to allow it to have a free rotatory motion, by which means the parts, with the recesses and rivet-holes, may be cast complete, requiring no drilling or reaming in putting together." The claim is: Making the collar of the loose jaw in two parts, so that the nut may be placed between them, and, when connected together, the collar surrounds the nut and retains it in position, for the purpose above set forth.

In April, 1875, on final hearing on pleadings and proofs, an interlocutory decree was entered, finding that the defendants had infringed the first claim of the patent of 1866, and the whole claim of the patent of 1867, and decreeing that

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the plaintiff "recover of the defendants the profits made and received by the defendants, and the damages, if any, over and beyond the amount of such gains and profits, suffered by the complainant, by reason of the infringement and violation of the rights of the complainant, which it is adjudged have been so committed by the defendants," and referring it to a master, George J. Sicard, Esquire, to take proofs of, and to compute the amount of, the said profits and damages, and report the same to the Court, and awarding a perpetual injunction against the defendants. The master has filed his report, by which he finds that the plaintiff has not offered before him evidence of the damage suffered by the plaintiff, or of profits realized by the defendants, by reason of the infringement and violation by the defendants of the rights of the plaintiff in the inventions and improvements referred to in the decree, and that the plaintiff is entitled, under said decree, to nominal damages only against the defendants. The master has stated at length his reasons for his finding. He proceeds upon the view that it is settled law, that, when a patent is for an improvement of a machine, the plaintiff can recover only such damages as are occasioned by the use of the improvement, and the inquiry is as to what profit the defendant acquired by the use of the improvement alone, and not by the manufacture of the whole machine. The master states, and the record shows, that all the evidence offered by the plaintiff, has been with the view of showing the damages to him and the profits to the defendants, in the manufacture of the infringing mop as a whole. At the close of the evidence given before the master on the part of the plaintiff, the defendants moved to dismiss the proceedings, on the ground that no basis had been laid for the master to compute or estimate the plaintiff's damages, and that consequently the plaintiff was entitled to only nominal damages. The point was reserved, and the defendants put in evidence on the basis assumed by the plaintiff. The master says: "There has been no evidence before me that would warrant a finding that the whole success of the mops in question, either of the defendants' or of the complainant's manufacture, was due to the peculiar construction described in the claims of the patents above referred to. Nor

could I find, from the evidence, that that peculiar construction constituted the sole feature that made the mops a success in the market. Such finding would be required to sustain the complainant's theory of damages. The evidence showed that Garretson had invented and patented an improvement in mops ; that the mops made by him and embodying the improvement were successfully introduced into the market ; that, after the manufacture and introduction by the defendants of the infringing article, the trade of the complainant had decreased ; and there was much documentary and other evidence produced to show the amount of the cost and of the sales by both parties. All this testimony was given on the theory, which is the complainant's position in this case, as I understand it, that the claims infringed are indispensable to the success of the mop and form the only and vital part and principle of its operation. In other words, it is claimed that this mode of construction, connection and operation of the collar and loose jaw, is all there is, practically speaking, of the mop. By the patents themselves, and the claims thereof, it is clear that the complainant's invention is not of a machine, but of an improvement. He has taken the mop, an instrument in use from time immemorial, and claims that, by the introduction of a new mode of constructing and operating it in one of its parts, he has added to it all that is valuable in it. The complainant has given before me no evidence aimed at the separation of the damages, or the apportionment of a certain proportion of the defendants' profits in manufacturing mops, as belonging to the peculiar features which are the complainant's invention, and which the defendants have wrongfully adopted and incorporated into the instrument made and sold by them. He rests all his evidence on the proposition, that his invention covers the whole ground and lends to the article manufactured by the defendants all its value. I cannot agree to that view, upon the evidence submitted. The complainant's invention has peculiar and distinctive features in the form of construction and operation referred to, but these features alone do not constitute a mop, and there were many valuable mops in the market before these features were at all introduced. The evidence shows

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many such mops as made in the past, and even as made in the present, for the defendants appear to be now selling with success a mop not claimed to infringe the complainant's invention. The complainant has given no testimony before me to satisfy my mind that the sole salability of the mops in question arose from their possessing the features I have referred to as embodied in the complainant's invention. These features are the form of the construction of the collar in two pieces, the mode of connecting the collar and the nut, the presence of flanges on the latter, and its enclosure within the circuit of the former. The nut, the collar, the wire-binder, the cross-head fixed and riveted to the handle, the grooving of such cross-head, the notching of its ends to steady and guide the wire-binder, the threaded shank, the connection and securing of the wire-binder to the collar—all these are independent of the plaintiff's improvement, and most of them are old in the history of the invention. Yet, they contribute to the successful operation of the mop, and are found in the mops of the complainant as well as those made by the defendants. Combinations of these various elements of invention, in different forms, are found in most, if not all, of the exhibits in the case. Some of these elements are common to all the successful mops spoken of by the witnesses, and may be considered as quite indispensable to the construction and practical operation and salability of the instrument. I cannot believe that none of them contributes any value to the mops in question. As these elements and combinations exist in the mop made and sold by the defendants, and adjudged to be an infringement, the finding of more than nominal damages for the complainant would, on the complainant's theory, involve the proposition that there is not, among all of these elements or combinations, any one that involves a principle of sufficient practical use to add to the salability or actual value of the machine. I believe, on the contrary, that all of these elements have combined to make the mops in question successful, and it is too much to say that no proportion of the trade diverted from the complainant by the defendants, or of the profits they realized from the sale of their mop, was due to the presence of some one or more of them. At least,

while so many elements of success are present in the instrument, I would not be warranted in finding that its entire success was due to its embodiment of the complainant's invention, unless direct evidence on that subject were furnished. As no evidence has been given before me of damages resulting to the complainant, or of profits accruing to the defendants, from the manufacture and sale of the improvement of the complainant, as distinguished from the machine itself, I find for the complainant nominal damages only." The plaintiff has excepted to the master's report. The exceptions insist that the actual damages to the plaintiff, for the mops made and sold by the defendants in infringement, which the plaintiff would have made and sold but for the infringing manufacture and sale by the defendants, are the difference between what the manufacture and sale of such mops would have cost the plaintiff, and the amount for which the plaintiff would have sold such mops; and that the amount of the profits made and received by the defendants, by reason of the infringement adjudged, is the difference between what the manufacture and sale of the infringing mops made and sold by the defendants cost the defendants, and the amount for which the defendants sold said infringing mops.

There is, thus, a pointed antagonism between the views of the master and those contended for by the plaintiff. I have cited, thus fully, the text of the master's views, because it would be difficult to express, in more apt words, the considerations properly applicable to the determination of the questions involved in this case. They may be amplified and illustrated, but the master has expressed, with clearness and force, the true principles which, on the evidence before him, apply to this case.

The argument on the part of the plaintiff is, that, at the time the defendants began to infringe, the plaintiff's mop and the mop of one Taylor held a monopoly of the market, and were not competed with seriously by other mops, or to an extent, which interfered with an arrangement which had been made between the proprietors of the patents covering the plaintiff's mop and the proprietors of the patent covering the Taylor mop, whereby the price of those two mops was maintained

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at \$2 a dozen, affording a profit of at least \$1 a dozen ; that the defendants sold the infringing mop at \$1.75 a dozen ; that the plaintiff had an establishment at which he could have made mops enough to fill all ordinary orders for mops ; that his mop was known and his trade was established ; that the effect of the infringement was to cause a large falling off in the plaintiff's sales ; that it was the taking, without right, of the plaintiff's patented improvements, which enabled the defendants to enter the mop market, because the plaintiff's mop and the Taylor mop had substantially driven out of the market all other mops, by making it impossible to sell such other mops at a profit ; that, while it is generally true that the patentee of an improvement in an article is not entitled to the profits on the sale of the whole article, the rule is otherwise when, as a matter of fact, the improvement so dominates and controls the article in the market held as an exclusive monopoly by the patentee, that the only way in which the article can be sold at all at a profit, is through the sale of it with the patented improvement ; that the advantage which the defendants gained was a market for mops at a large profit, when there was no other form of mop open to the public by which they could have obtained any considerable sale at a profit ; and that the only way to reach a result consonant with the substantial justice of this case, is to regard the mop as an article of commerce, under the operation of laws whereby an improved article will supersede and displace an unimproved one, destroying the possibility of producing it at a profit, and thus driving it out of existence, so that the superior article, by virtue of its superiority, dominates in the market until it in turn gives way in the progress of new improvements in its kind.

It is a weak point in the argument for the plaintiff, that it assumes, without sufficient evidence, that the market for the plaintiff's mop was made solely by the fact that the mop contained the improvements patented by the plaintiff's patents. This would not follow, even from the fact that the mop, with such improvements, had driven other mops out of the market. Energy, diligence, business tact, superior facilities and skill, and fortuitous circumstances, contribute largely to the success in the market of even an article which has all the superi-

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ority, in its line, that it is claimed for the plaintiff's mop. In the present case, there was an especial element, entirely outside of plaintiff's patents, which made the manufacture and sale of the plaintiff's mop profitable, and that was the combination with the owners of the Taylor patent, under which the price of both mops was fixed at \$2 a dozen.

The argument on the part of the plaintiff leads to the conclusion, that, when an article or a machine, with a given patented improvement embodied in it, has a controlling preference in the market, over the article or machine which does not embody such improvement, it must be conclusively inferred that such preference is due to the improvement; and that the patentee, in case of infringement, is entitled to the profits made by the infringer from the manufacture and sale of the whole article or machine, and is entitled, as damages, to the profits he would have made on the manufacture and sale of an equal number of entire articles or machines made and sold by the infringer. This would often cause a small improvement on a costly machine to draw to itself very large profits, entirely out of proportion to the relation existing between the improvement and the rest of the machine, and, in cases where the unpatented parts of the machine were quite as indispensable to the machine as the patented improvements, and even more indispensable. The profit on the entire machine would virtually become the license fee for the use of the patented improvement. In the case of a machine embodying several patented improvements, in infringement of several patents belonging to several different persons, each patentee would claim that it was his particular patented improvement which caused the machine to dominate the market, and each would claim the profits of the manufacture and sale of the entire machine, and damages based on the same principle. The patentee must, in every case, give evidence tending to separate or apportion the defendant's profits and the patentee's damages, between the patented feature and the unpatented features, and such evidence must be reliable and tangible, and not conjectural or speculative; or he must show, by equally reliable and satisfactory evidence, that the profits and damages are to be calculated on the whole machine, for the

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reason that the entire value of the whole machine, as a marketable article, is properly and legally attributable to the patented feature. In the present case, the master reports that the patentee has failed to give such evidence, and I concur with the master in his conclusion.

The plaintiff's exceptions to the master's report are all of them overruled. Those which relate to the admission of testimony objected to by the plaintiff, (conceding that such objections can be availed of by exceptions to the master's report,) become immaterial, in view of the fact, that, because the plaintiff failed to give adequate evidence as to profits and damages, the defendants were not put upon their defence in that respect, and it is unimportant whether they gave competent evidence or no evidence. If the evidence objected to is all stricken out, the defendants are protected by the plaintiff's failure. They are not called upon to rebut until the plaintiff has made out a case. *Black v. Munson*, 14 Blatchf. C. C. R., 265. The 18th exception, that the master excluded material evidence offered by the plaintiff, and sustained the defendants' objections thereto, is too general. The 19th exception, that the master received in evidence testimony offered by the defendants, and overruled the plaintiff's several objections thereto, is too general.

The exceptions being overruled, the plaintiff asks that the case be referred back to the master, with instructions setting forth the principles on which the proper assessment of damages and profits should be made, and directing the master to receive such further evidence pertinent thereto as the parties may offer. This application is not made on any showing that the plaintiff failed, through inadvertence, to give other or further evidence, or that there exists any other or further evidence which he can give. The idea of inadvertence is negatived by the entry on the record, before referred to, at the close of the plaintiff's testimony, when the defendants moved to dismiss the proceedings on the ground assigned. No proper foundation is laid for granting the application.

There must be a decree in accordance with the master's report, and awarding to the plaintiff the costs of the suit, except the costs of the reference before the master, and of his

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report, and of the exceptions, and of the hearing thereon, and awarding to the defendants the costs of such reference, and report, and exceptions, and hearing.

James A. Allen, for the complainant.

Francis A. Macomber, for the defendants.

RUSSELL JENNINGS

vs.

E. N. PIERCE ET AL. IN EQUITY.*

In a suit in equity on letters patent, the defence of the insufficiency of the specification to enable the invention to be practised, must be set up in the answer, or it cannot be availed of.

The experimental use of an invention, by the inventor, as distinguished from its public use, considered.

Acts of an inventor, to determine the value, utility or success of his invention, are to be liberally construed, if the acts are not inconsistent with the clear intention to hold the exclusive privilege.

(Before SHIPMAN, J., District of Connecticut, July, 1878.)

SHIPMAN, J.

This is a bill in equity to restrain the defendants from an illegal infringement of letters patent which were granted to the plaintiff on July 31st, 1866, for an improved machine for swaging the heads of screw augers. The application for the patent was made December 19th, 1865. The answer avers that the alleged invention was in public use by the plaintiff and by others, with his knowledge and consent, for more than two years prior to his application for said letters patent, and denies that the defendants "have infringed or invaded any of his (the plaintiff's) rights." Infringement is not substantially contested. The dies of the plaintiff have been used by the defendants.

* 15 Blatchf. C. C. R., 42.

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Upon the trial, the defendants claimed that the patent was invalid, because the description of the alleged invention and the manner of making and constructing the same, was not set forth in the specification in such full, clear and exact terms as to enable any person skilled in the art to which it appertains, to practise the invention or to make the patented machine. This defence was not set up in the answer, and, therefore, is not open to the defendants. *Goodyear v. Providence Rubber Co.*, 2 Cliff., 351, 2 Fisher, 499, and 9 Wall., 788.

The substantial question in the case is, whether the patented invention was in public use by the patentee for more than two years prior to the date of the application. The plaintiff procured, in 1855, letters patent for an improved hand-made auger bit. He thereafter commenced experiments, to determine whether auger bits could be headed by machinery, an important point being so to construct the mechanism, that heated cast steel could be swaged before the metal had time to chill. About January 1st, 1859, he came to the conclusion, as the result of experiments with cast iron dies, that this difficulty could be obviated, and that cast steel auger heads could be manufactured by swaging; and he then proceeded to perfect the mechanism, which consisted, in brief, of a die and mould, or a pair of dies, and the appropriate machinery by which the dies were operated. It is not necessary to describe, with accuracy of detail, the successive stages of development through which the perfected machine progressed. It will be sufficient to state the history of the invention very briefly. The cast iron dies which were used at first broke under the force of the blow of the plunger. Cast steel was then tried. A hole was drilled in a solid block, having enough solid metal to form the three teeth of the die between the places which were drilled out. The teeth were formed by digging out the metal between and around the teeth. In order to drill the hole, the metal must be annealed, and it was thereby made soft. Consequently, the dies wore away under the pressure of the plunger, so that the head of the swaged bit was too large. To remedy this difficulty, a second set of dies were made, in which the bits which had

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been headed were again swaged, so as to reduce the size of the heads. This seems, however, to have been a temporary expedient. In consequence of the softness of the iron, the upper tooth was apt to bend, and the metal would roll under and fill up the space between the upper and the next lower tooth, so that the edge of the twisted blank could not enter this space, and it was necessary frequently to remake the teeth. To avoid this defect, one tempered detachable tooth was inserted in the die. In 1863, a solid block containing two, and afterwards three, detachable tempered teeth, was inserted in a space in the die which had been mortised out. But the teeth wore unevenly. Finally, after various plans, each tooth was inserted separately in its separate block, so that each tooth and its block could be removed. This improvement was made in 1865. During the same time, the press was also being altered and perfected. The last improvement was made in December, 1865, and the application for a patent was forthwith sent to the Patent Office. During all this period, the plaintiff was the owner of a factory, and carried on his business of manufacturing hand-made augers. He had a contract to manufacture three hundred bits of different sizes per day, but was not able to furnish that number. During nearly each month from February, 1859, to 1865, in the intervals of his experiments, he headed bits upon the machine, which, when made perfect, were delivered, with the hand-made bits, upon his contract. Prior to November 1st, 1863, a great many were imperfect and were wasted, and nearly all were worked over by hand, or went through the second set of dies. The plaintiff usually operated the machine himself, but some of his workmen, who were sufficiently skilled, occasionally worked on it also. During all this period, the plaintiff was devoting whatever time he could spare to experiments upon his invention. He applied himself diligently to the task of perfecting his machine, as his means and opportunities permitted. He ran the machine as an inventor, but he also tried to get from it what he could for his profit, by using it privately and with intentional and effectual concealment from the public. Its construction was kept secret. It was necessarily used in a room where there was a

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forge and where there were other workmen, but the public was carefully excluded, and the workmen were warned of the approach of strangers by the ringing of a bell which communicated with another part of the factory. When the machine was not used, it was covered with a cloth. Until 1864, its use was not profitable. In that year the machine produced better results than it had before, and, between November 1st, 1864, and July 10, 1865, the dies were brought to such a state of perfection, as to satisfy the plaintiff that the process of forging bits by dies, at one operation, could be advantageously performed, as compared with the process of hand forging.

It is manifest that the use of the dies, and of the machine, in the state in which they were, from time to time prior to December, 1865, was mainly an experimental use, and that the plaintiff used them, as an inventor, for the purpose of perfecting the invention and of testing its value. The use for profit was incidental and subordinate to the experimental use, and the entire use may, with propriety, be considered as experimental. The use was not public use, within the meaning of the statute, that is, a use for profit, as distinguished from a use for experiment and for testing the value of the invention.

When the patent was applied for, the detachable teeth and detachable backs were not mentioned in the specification, and, so far as teeth and dies are concerned, the patent was granted for the invention as it stood prior to November, 1863, before the last improvements were added. It is claimed, that, if the invention, as patented, was in public use by the patentee, or on public sale, with his knowledge and consent, for more than two years before the date of the application, such patented invention had thereby become the property of the public, notwithstanding experiments were being made during such two years, and subsequent unpatented improvements were added prior to the date of the application. This is true. But the defendant has still failed in establishing that the invention, as patented, in the state in which the dies were prior to November, 1863, had been in public use more than two years prior to December 19th, 1865. The use of the invention, as patented, was experimental, for the purpose of testing its value.

Acts of an inventor, to determine the value, utility or success of his invention, are to be liberally construed, if the acts are not inconsistent with the clear intention to hold the exclusive privilege. "Public use of an invention, unless by the patentee himself, for profit, or by his consent and allowance, will not work a forfeiture of his title, as such forfeiture is not favored, unless it clearly appears that the use was solely for profit, and not with a view of further improvements, or of ascertaining its defects, or for any other purpose of experiment in reducing the invention to practice." *Jones v. Scwall*, 6 Fisher, 343, and 3 Cliff., 563; *Pitts v. Hall*, 2 Blatchf. C. C. R., 229; *Agawan Co. v. Jordan*, 7 Wall., 583. It would be a harsh limitation of the statutory rights of an inventor, which should give to a naked infringer the privilege of using an invention, because the patentee had attempted, in good faith and in secrecy, to incidentally make his experiments of some pecuniary benefit, while he was patiently endeavoring, amid many failures, to remedy the defects of the machine, test its value, and ascertain whether it could be used advantageously, and whether it ever would be of any benefit either to himself or to the public. Courts have not favored this ground of forfeiture, and have required clear evidence to establish the fact that the use was not experimental. In this case, I am satisfied that the evidence is not of that character which has ordinarily been required to prove that an inventor had, by his own acts, forfeited his right to the exclusive ownership of the invention.

Let there be a decree for an injunction and an account.

Charles R. Ingersoll and *John S. Beach*, for the complainant.

Charles E. Mitchell, for the defendants.

Rogers v. Ennis.

JAMES J. ROGERS

vs.

ALBERT G. ENNIS. IN EQUITY.*

The letters patent granted to James J. Rogers, July 10th, 1877, for an "improvement in table beverages," the claim of which is, "The composition, as a table beverage, consisting of water, sugar, oil of wintergreen, alcohol, yeast, and burnt sugar, in the proportions substantially as described," are valid.

The letters patent granted to James J. Rogers, December 25th, 1877, for an "improvement in birch beer," the claim of which is, "The improved material herein described for producing beer called birch beer, and consisting of water, sugar, oil of birch, alcohol, home-made yeast and burnt sugar, in the proportions substantially as specified," are valid.

The inventions are new and useful compositions of matter.

(Before BLATCHFORD, J., Northern District of New York, July, 1878.)

BLATCHFORD, J.

Letters patent were granted to the plaintiff, July 10th, 1877, for an "improvement in table beverages." The specification states that the invention is "a new and useful composition for a table beverage," and "consists in a mixture of water, sugar, oil of wintergreen, cut in alcohol, brewer's yeast and burnt sugar." It then gives directions as to the manner and proportions in which the ingredients are to be compounded.

The claim is, "The composition, as a table beverage, consisting of water, sugar, oil of wintergreen, alcohol, yeast, and burnt sugar, in the proportions substantially as described." Letters patent were granted to the plaintiff, December 25th, 1877, for an "improvement in birch beer." The specification states that the invention is "a new and useful composition

* 15 Blatchf. C. C. R., 47.

called birch beer," and "consists in a mixture of water, sugar, oil of birch, cut in alcohol, home-made yeast and burnt sugar." It then gives directions as to the manner and proportions in which the ingredients are to be compounded. The claim is, "The improved material herein described for producing beer called 'birch beer,' and consisting of water, sugar, oil of birch, alcohol, home-made yeast and burnt sugar, in the proportions substantially as specified."

The defendant contends that all that the plaintiff did was to put into the beer the oil of wintergreen, in the one case, and the oil of birch, in the other; that the plaintiff invented no new process of making the beer; and that his invention was not one of any new or useful composition of matter, because the mere putting into the compound the oil of wintergreen or the oil of birch, as a flavor, is not a useful improvement, within the patent laws. The defendant further contends that the use of the oil of wintergreen or the oil of birch in the compound, is not the use of any material or substantial part of the compound, so as to authorize the granting of a patent for the compound, the use of the other materials to form the compound not being new.

These patents stand on narrow ground, but yet the defendant has infringed each of them, by using the exact formula laid down by the patentee in each case. The compositions of matter are shown to be useful, agreeable to those who use them, profitable to the plaintiff through his manufacture and sale of them, and new. This constitutes patentability. Although all the ingredients except the oil of wintergreen or the oil of birch may have been compounded together before, to make a composition of matter, the addition of the given oil, whether to replace some other ingredient or not, makes a new composition of matter. It appears in evidence, that the bark of the birch tree had been previously used as flavoring matter for a beer; that the plaintiff found he could get a stronger and better flavor, at less expense, by using the oil of wintergreen, the flavor of which is like that of black birch; and that he afterwards substituted the oil of birch for the oil of wintergreen, with some other slight changes of ingredients and treatment.

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There must be a decree for the plaintiff, as prayed for, in regard to each patent, with costs.

R. Holland Duell, for the complainant.

M. F. Brown, for the defendant.

THE READY ROOFING COMPANY ET AL.

vs.

BENJAMIN H. TAYLOR ET AL. IN EQUITY.*

The principles stated which govern the question whether a cause shall be re-argued, after a decision.

The rules stated which govern the question of granting a new trial, to introduce new evidence.

The knowledge and diligence of counsel are to be considered, on such question, the same as those of the party.

In this case, it was held, that, by the exercise of ordinary diligence, the new evidence sought to be introduced could have been discovered, so as to be introduced at the former trial, and that it was not of such materiality and weight that it would probably change the result.

The form of a decree establishing the validity of letters patent, commented on.

A violation of an injunction in a suit on letters patent not having been wilful, and a motion for an attachment for contempt for such violation having been made, with a view to determine whether the method used by the defendant was an infringement of the patent, the Court, in adjudging the defendant guilty of such contempt, ordered that he pay to the plaintiff the profits and damages on account of the violation of the injunction, and the costs of the proceeding.

(Before WHEELER, J., Southern District of New York, July, 1878.)

WHEELER, J.

This cause has been further heard on the motion of the defendants for a modification of the decree heretofore made on

* 15 Blatchf. C. C. R., 94.

the original pleadings and proofs, for reopening the case on affidavits of new proofs, for re-settlement of the decree, and the motion of the orators for an attachment for a violation of the injunction issued in pursuance of the decree. Ordinarily, parties against whom proceedings for contempt in violating an injunction are pending, will not be heard upon other proceedings to affect the injunction, until they have cleared themselves from, or purged themselves of, the contempt. But, in these proceedings, the parties appear to be endeavoring, by mutual understanding, to try a question of right between them, and not any charge for wilful disobedience of the order of the Court ; and, for the purpose of trying the right, all these motions have been heard together.

It is not understood, that, after a full hearing, and especially after decision thereupon, the parties to a cause have any right to have it re-argued by either the same or different counsel. Still, as a matter of discretion, the defendants have again been heard by new counsel. And, after re-examination of the cause, so far as has in any wise been thought due to the further argument, no substantial reason is seen for any decision different from that already made upon the case as originally presented.

The new proofs offered consist of three English patents and one American patent, and oral testimony of witnesses. The motion to re-open the case is, substantially, a motion for a new trial, for the introduction of new evidence, and must be governed by the same rules that such motions are. These rules require that the evidence be newly discovered in fact ; that, by the exercise of ordinary diligence, it could not be discovered so that it could be introduced at the former trial ; and that it be of such materiality and weight that it would probably change the result. And, upon such questions, the knowledge and diligence of counsel must be considered the same as those of the party.

It does not at all appear but that this evidence was all seasonably known to the counsel of the party now seeking an opportunity to introduce it. New counsel make the motion, and no affidavit or statement of the former counsel as to his knowledge is offered, nor the lack of it in any way explained

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or supplied. The affidavit of the defendant Rankin only is offered on this point, and that is confined to the state of his own personal knowledge, and does not extend to his belief even of that of the counsel or co-defendants. And, if that of himself was all that is necessary to be shown, his affidavit falls far short of the requirements. As to the patents, he merely says that he never saw the American one, and did not know of the existence of two of the English ones till after the hearing. The connection in which he denies seeing the one and knowledge of the other raises a quite strong inference that he knew of the existence of the former, and, if he did, probably his counsel knew of its contents. And, whether he know of any of them or not, they all appear to have been found among the records of the Patent Office, where they might have been found as readily before as after the hearing.

With respect to the new oral proof, he says that he took much personal interest in the preparation of the case for trial, and that not until during the argument of the case before the Court did it seem possible to him that any distinction would be attempted to be drawn, by any body, between a layer of bituminous material and a coat of the same mixture between sheets of tarred roofing paper; and that during the examination of the witnesses no such distinction was, by anything that transpired, called to his attention. In this he is clearly either at fault, or in error. That distinction was made prominent in the testimony of the patentee, at the first taking of testimony in the cause on the part of the orators, and he defined what he claimed to be a layer of bituminous material in the sense used in his patent and in the trade, very distinctly, and also the difference between it and a coating, in the same senses. He said: "These layers of bituminous composition and paper" "have a distinct identity and utility of their own, and are as different from each other as the layers of brick and layers of mortar are in a brick house;" and that "it would be impossible to conceive of a coating separate and apart from the thing coated." That the counsel of this defendant fully understood this distinction at that time fully appears from the cross-examination, where he inquired particularly of the

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witness in regard to it. The same distinction also appears to have been taken at various places in the cross-examination of the defendants' witnesses. So, if the defendant means to be understood that the distinction was not made at all, he is in a grave error; if merely that he did not notice it, he was greatly in fault, if he relied upon himself to notice what occurred. But, whether he noticed it or not, his counsel did, which, as before mentioned, is the same as if he had. The distinction was apparent, and the failure to notice and comprehend its materiality, if there was such failure, is wholly unaccounted for.

The defendant does not expressly say whether he knew of the existence of this new testimony or not; but, as some of it is from himself, he must have known of that, and as most of the rest is from witnesses before examined in his own behalf, he probably knew of that. That from wholly new witnesses besides himself would be wholly indecisive.

The application seems to be reduced to standing upon the ground, solely, that the defendant himself did not notice that distinction which was early and clearly made, and that he could better his case now that he has noticed it. Had he been managing his own cause this would not furnish one of the gravest reasons mentioned by the late Circuit Judge, Johnson, in *Buerk v. Imhaeuser*, 10 Off. Gaz., 907, for the departure from the ordinary course of the administration of justice sought. Still less is it sufficient when he was represented by able counsel, who, for aught that appears, noticed, appreciated and attended to that which he did not.

No point in these respects has been made by the counsel for the orators, but the ending litigation is a matter in which the Courts themselves and other suitors, as well as the public, have an interest, and new trials should not be granted in a court where so many causes are waiting for one trial even, as there are in this, especially, without proper reasons made to appear not only when questioned, but in fact.

But, if these grounds should be passed, there would remain the question whether the new proof is of sufficient materiality and weight. One of the English patents was for a coating or layer of adhesive material and broken glass on paper or

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boards, to be applied to the bottoms of ships or other surfaces, to protect them from worms ; one for a fabric composed of a sheet of cloth between two layers of bitumen ; the other for a layer of bituminous material, but whether it was placed between sheets of paper or cloth does not clearly appear. The American patent is for a fabric " consisting of a central layer or web of cloth, or its equivalent, covered on both sides with adhering layers of water-proofing, the outward side of one of which is covered with a layer of paper fixed thereto by contact with the water-proofing while it is in a warm and plastic state, while upon and embedded in the outward side of the other layer of water-proofing is a layer of sand or its equivalent, forming the uppermost or weather surface of the article." The patent in controversy is for a fabric composed of a layer of bituminous material between sheets of saturated paper, increased in thickness by the addition of alternate layers of material and paper when and as desired. The mere statement of the composition of these various fabrics shows that the one covered by this patent differs from all the others. That described in the American patent is most like this. That has the same layers of water-proofing, as it is there called, but not protected by saturated paper, nor its equivalent, but by a layer of sand, on the outside, and by common paper or cloth between the layers, and common paper on the inside, making the structure of it quite different.

The oral proof, if received, would be mostly that of witnesses before examined, as before mentioned, merely making more full explanations and descriptions of what they have already described. Most of them have already testified to making material similar to that patented, before the time of the invention, but, when called upon to describe the process, have given one that would produce a fabric without an interposed layer of bituminous material. They now say that the nature of the materials used was such that more than a coating would necessarily be left. Probably it would, in some parts of the product ; but, if so, the making of a layer was not the object sought, and the one produced would be uneven and thin or wholly wanting in places, and not at all such a

layer of uniform thickness as the patent describes. Such places of thick material account for what appearance there is of a layer in the fragments of old roofing attached to the affidavit of William A. Gay.

The new witnesses, aside from the defendant Rankin, are E. Burgess Warren, whose testimony would be to making the same material before testified about by Howard Kirk and merely cumulative to his ; and Davis W. Bailey, whose testimony would be to making roofing of saturated cheap muslin between sheets of saturated paper, of saturated drilling adhered to saturated roofing felt by a mixture of residuum of coal-tar, pine-tar, and pulverized soap-stone, and by substituting manilla paper for the muslin, before the invention of this patentee. These products would be different from the patented fabric, or, at most, not so nearly like it that their manufacture would clearly be an anticipation.

Altogether, this falls far short of the plainest proof that the new evidence would lead the Court to a different result, said by the learned Circuit Judge to be requisite, in the case of *Buerk v. Imhaeuser*, before cited.

The decree, as already settled, establishes the validity of the patent, without giving it any construction, and restrains infringement in the same general terms. This is understood to be in accordance with common but not uniform practice. Where a patent is open to construction, and is sustained upon some construction given, it would tend to lessen doubt and confusion to have the decree conform to the construction. This patent is not very peculiar in this respect, and, whatever construction it has received, is readily accessible in the opinion filed. Under these circumstance, it is not thought to be necessary to the preservation of the rights of the parties to now set aside the decree filed and settle it anew.

The motions of the defendants are, therefore, severally overruled.

The patent established by the decree is, as before mentioned, for a roofing fabric composed of a layer or layers of bituminous composition, protected and strengthened by outer and alternate sheets of saturated paper. The defendants avow making, since the injunction, and intention to further

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make, if allowed, four sorts of roofing, which the orators claim are infringements, and the defendants that they are not. Each has one or more layers of bituminous composition. It is said that the layers are of coal-tar pitch, which is different from bitumen, and that, therefore, the fabric is different. The patent specifies bituminous material. Whatever has the qualities of bitumen is, to that extent, bituminous. This pitch, although very different from bitumen in some respects, has the qualities of it in several, and, perhaps, in most that are important in these fabrics. They are both adhesive, impervious to water, and plastic, and useful for these qualities in this art. In this sense, which is that of the patent, the pitch is bituminous. In each sort of the defendants' roofing the layers are protected on the side uppermost in use by saturated paper, and in two of them on the under side also. In one of the others unsaturated manilla paper, and in the other unsaturated felt, is substituted for the saturated paper on the under side. In some of them cloth, in others unsaturated manilla, and in still others unsaturated felt paper, is inserted between the layers. Those that have saturated paper on each side of the fabric embrace all the ingredients of the orators, arranged in the same way, for the same purposes, and to the same effect, with the addition of the interior sheets of paper and cloth. These additions may be improvements, but, if they are, the use of the invention, to improve it, is none the less an infringement. Neither manilla paper nor the unsaturated felt is a new discovery, as a substitute for saturated paper, to protect the under side or strengthen the interior of such fabrics. They are mentioned or alluded to as such in the original patent. It is argued, that the use of equivalents known to be such at the time of the patent, and not specified as such in it, is not an infringement, and that the reissue cannot be helped out by reference to the original, in this respect. Of course, the reissue is all the patent in force, but then the argument does not seem to be well founded. In *Seymour v. Osborne*, 11 Wall., 516, Mr. Justice Clifford, at p. 556, says : " Mere formal alterations in a combination in letters patent, however, are no defence to the charge of infringement, and the withdrawal of one ingredient

from the same and the substitution of another which was well known at the date of the patent as a proper substitute for the one withdrawn, is a mere formal alteration of the combination if the ingredient substituted performs substantially the same function as the one withdrawn." Here the manilla paper and unsaturated felt do perform substantially the same function as the saturated paper they are substituted for in the defendants' fabrics. This case is much like *Watson v. Potter*, 4 Scott, 91, and Web. Pat. Cas. 585, in which Ch. J. Tindal instructed the jury that the question of infringement was not simply whether, in form or circumstances that might be more or less immaterial, that which had been done by the defendants varied more or less from the specifications of the plaintiff's patent, but whether, in reality, in substance, and in effect, the defendants had availed themselves of the plaintiff's invention, in order to make that fabric.

In this case, the samples of the different manufacturers, and the testimony of witnesses expert in the business, show quite satisfactorily, that the defendants have availed themselves of the invention secured by the patent, to make the fabrics they avow making. For this use of the invention they are adjudged guilty of contempt. As this use does not appear to have been a wilful disregard of the orders of the court, and the question in regard to it has been submitted by the parties in this manner, it is not thought that any further punishment for it than the payment of all profits made or damages occasioned by it, with the costs of these proceedings, is necessary, in order to do justice to the parties and vindicate the authority of the court. The payment of these sums is deemed necessary for those purposes, and should be secured, if necessary, by attachment of the persons of the defendants. Therefore, let an order be entered denying the motions of the defendants, adjudging them guilty of contempt, that a separate account be taken by the master to whom the cause is referred, of the profits and damages beyond, if any, on account of this violation of the injunction, and for the separate taxation of the costs of this proceeding, and for the payment of the whole to the orators within twenty days from the filing the report of the master and taxation of the costs, and that, in default of

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such payment, the defendants be committed until payment be made.

Frank J. Mather, for the complainants.

James A. Hudson, for the defendants.

SIMEON HOWES ET AL.

v/s.

CHARLES MCNEAL. IN EQUITY.*

The reissued letters patent granted to Simeon Howes, Gardner E. Throop, Alpheus Babcock, Norman Babcock and Carlos Ewell, March 5th, 1872, for an "improvement in grain separators and scourers," and extended for seven years from March 16th, 1872, the original patent having been granted to Howes and Throop, March 16th, 1858, are valid.

The first claim of said reissue, namely, "The combination with a suction fan, scouring mechanism, perforated inclosing shell, and outer tight casing, of a draught passage connecting the chamber outside of said perforated shell directly with the fan case; said passage being provided with auxiliary air inlets or openings, substantially as and for the purpose set forth," is infringed by a machine which embodies in combination all the elements which make up such claim, they being combined in substantially the same way and for the same purpose, and having the same combined mode of operation as in the patent, although in the infringing machine the direction of the current is at first reversed, and the refuse is carried through an opening in the inner wall, and then through an auxiliary fan into another upward passage, to reach the main fan, instead of, as in the patent, being at first carried directly upward through the draught passage, to reach the main fan, and although in the infringing machine, the increased supply of air is brought into the inside of the scourer, and through the perforations into the annular space between the scourer and the outer casing, instead of, as in the patent, coming through auxiliary air inlets in the bottom of the outer casing.

The application for the patent was filed in January, 1855, and rejected in March, 1855. In June, 1856, the inventors filed a paper stating that

* 15 Blatchf. C. C. R., 103.

they withdrew their application, and requesting the return of \$20. The withdrawal was made for the purpose of filing a new application. The \$20 was refunded in June, 1856. At that time one of the inventors directed E., a patent agent, to prepare a new specification. E. neglected to do so till April, 1857. At that time a new specification was sworn to by both inventors, and sent to E. with his fee, and the Patent Office fee, and a power of attorney to E. The application was not filed by E. till February, 1858. The patent was issued in March, 1858: *Held*, that there was no abandonment of the invention to the public, and no consent to its use by the public for more than two years before February, 1858; and that there was, in judgment of law, a continuous application.

A rejected application for a patent is, of itself, no evidence of the existence of a perfected invention at the date it was filed, in the absence of any other evidence of the construction and operation at that date of a machine embodying the invention described in such application.

The second claim of said reissue, namely, "In a combined scourer and grain separator, the arrangement of two wind trunks side by side, in the manner shown and described, and for the purpose herein set forth," is valid, although each of its two separators is, in and by itself, like a separator in a prior machine.

(Before BLATCHFORD, J., Northern District of New York, August, 1878.)

BLATCHFORD, J.

This suit is brought for the infringement of reissued letters patent granted to Simeon Howes, Gardner E. Throop, Alpheus Babcock, Norman Babcock and Carlos Ewell, March 5th, 1872, for an "improvement in grain separators and scourers," and extended for seven years from March 16th, 1872, the original patent having been granted to Howes and Throop March 18th, 1858. The specification of the reissue says: "The improvements relate to that class of combined machines which both scour the grain and also separate the heavy grain from the light grain and screenings, and the cheat and light grain from the dust, chaff and other refuse. The object of the invention is to effect a more perfect cleaning and separation of smut and other refuse from the full grains and from the cheat and lighter grains than has heretofore been accomplished, and at the same time render the machine more compact, simple and cheap in construction, and enable it to be more conveniently operated and regulated than other machines. The invention consists, first, in the combination with a suction fan, a perforated inclosing shell or cylinder, and

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an outer tight casing, of a draught passage leading directly from the inclosed space outside of the scouring shell to the fan case, and provided with auxiliary air inlets, whereby the particles of smut and other impurities, as they are detached from the grain and drawn or forced through the perforations of the cylinder, will be removed and conducted directly to the fan ; second, in the combination with a grain scourer and suction fan, of two separating wind trunks, arranged side by side, one receiving the grain before it enters the scourer, and effecting what is termed a preliminary separation, and the other receiving the grain as it is discharged from the scourer, and effecting what is termed a subsequent separation, each wind trunk effecting three separations in a similar manner ; first, of the full or plump grain ; second, of cheat and light or shrunken grain ; and third, of the smut, dust, chaff and other refuse ; the products of the second separation from both wind trunks being discharged near each other on the same side of the machine, whilst the products of the third separation (the refuse material) are conducted from both wind trunks into the eye of the fan." The drawings contain four figures. Figure 1 is a vertical section through the preliminary separating wind trunk. Figure 2 is a vertical section through the subsequent separating wind trunk. Figure 3 is a vertical cross-section, made at right angles to the sections in figures 1 and 2. Figure 4 is a horizontal section. The specification says : " Like letters of reference designate like parts in each of the figures. A is the frame of the combined machine ; B, the perforated smutting or scouring shell or cylinder ; and C, the surrounding case, leaving a space, D, between the two, into which air is admitted through narrow auxiliary openings, *c*, at the bottom. E is the central vertical shaft, to which is secured, within the scouring shell or cylinder, a beater cylinder, F, provided with radial wings or beaters, *f*. G are the fan blades, keyed to the upper end of the shaft ; and H, the fan case, with an opening or eye, *h*, in its top. I I are air pipes or passages, which connect the chamber D outside of the scouring cylinder directly with the fan-case. J is the preliminary and J' the subsequent separating wind trunk,

arranged side by side and separated by a partition, *k*. They are similar in construction, except that the ascending leg, *j*, of the subsequent separator extends downward nearly to the floor, so as to permit the grain from the scouring cylinder to be discharged through a spout, *l*, into it, as shown in figure 2, while the ascending leg *j* of the preliminary separator terminates a little above the top of the scouring cylinder, and is provided with a spout, *m*, through which the grain, fed into the leg by means of a spout or hopper, *o*, is conducted into the top of the scouring cylinder. On the opposite side of the machine each of the wind trunks are constructed with dependent chess hoppers, *p*, each provided with two flap valves, *p*¹, *p*², which are closed by atmospheric pressure except when forced open by the weight of the accumulated grain therein. Both wind trunks communicate with the eye of the fan through openings *q*, *q*¹, provided with slides, *q*², for regulating the size of the passages and force of the air currents. Motion being communicated to the shaft E by means of the driving pulley R, exhaust currents of air through the wind trunks, chamber D, and passages I leading to the fan, are induced in the direction indicated by the darts. The grain fed through the hopper *o* into the ascending leg of the wind trunk J is met by the upward current of air therein, which arrests the smut-balls, chaff, dust, and most of the chess and lighter grains, and carries them upward with it over to the opposite side of the machine, to the enlarged mouth of the chess hopper, into which the cheat and light grains descend by gravity (owing to the reversal of the air current and the weakened draught occasioned by the enlargement of the hopper), while the smut-balls, chaff and other refuse take the reversed direction of the air current and are conducted through the opening *q* into the eye of the fan. The plump grain descends from the hopper *o*, through the spout *m*, into the scouring cylinder, where it is subjected to the action of the beaters and the inner surface of the perforated cylinder, which rubs off and detaches from the kernels the smut and other adherent matter, which is forced and drawn by the centrifugal action induced by the beaters and by the suction in the space D, through the perforations of the scouring cylinder,

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into the chamber D, and conducted thence through the passages I directly to the fan, without commingling with, or again coming in contact with, the scoured grain. This is of the greatest importance, as the pulverulent smut is of such a sticky and adhesive nature, that, if the kernels become besmeared with the same, it becomes practically impossible to remove it, by any subsequent operation of the machine ; and especially is this the case in damp weather and when the grain is not thoroughly dry. The auxiliary inlets *c* supply the requisite amount of air to the space D to create, in connection with the fan, the necessary draught. The scoured grain passes from the scouring cylinder, through the pipe or spout *l*, into the ascending leg of the spout *J'*, near its lower end, where it is again met by an ascending current, which removes the light grains, chaff, dust, etc., remaining therein, and separates and deposits the light grains on the opposite side of the machine, in the same manner as the preliminary separation in the wind trunk *J* was effected. The smut, dust and other refuse are ejected from the fan case into a trunk, *S*, by which it is conveyed out of the apartment or building, as required. The combination, broadly, in a smut machine and grain separator, of an air passage, connecting an inclosed space outside of a perforated scouring cylinder with a fan, is not claimed as new ; neither is the combination of two wind trunks for effecting a preliminary and a subsequent separation in such combined machine, broadly claimed." The claims of the reissue are as follows : " 1. The combination, with a suction-fan, scouring mechanism, perforated inclosing-shell, and outer tight casing, of a draught passage connecting the chamber outside of said perforated shell directly with the fan-case, said passage being provided with auxiliary air inlets or openings, substantially as and for the purpose set forth. 2. In a combined scourer and grain separator, the arrangement of two wind-trunks side by side, in the manner shown and described, and for the purpose hereinbefore set forth."

The machine of the defendant has a suction fan arranged above the scourer ; a scouring mechanism consisting of revolving wings or beaters attached to the same shaft to which

the fan is attached ; a perforated shell inclosing the revolving beaters ; an outer tight casing surrounding the perforated shell, but so as to leave a space or chamber between such outer casing and such shell ; a draught passage connecting such chamber directly with the fan case, in such manner that the smut and other adherent matter which pass through the perforations in such shell into such chamber, are conducted to the fan without commingling with, or again coming in contact with, the scoured grain ; and auxiliary air inlets, in the shape of holes in the upper end of the scouring shell, instead of holes through the outer casing, as in the plaintiffs' machine. In the plaintiffs' machine, the refuse, after passing through the perforations, moves upward through the draught passage to reach the fan, and does not again come in contact with the grain, and the greater portion of the air which operates to make the necessary draught through the space outside of the scourer is that which comes through the auxiliary air inlets in the bottom of the outer tight case, and which inlets are at the end opposite the outlet. In the defendant's machine, the refuse, after passing through the perforations, moves downward into an auxiliary fan, by which it is forced upward through a draught passage into the fan above the scourer, and does not, after leaving the perforations, again come in contact with the grain, and the greater portion of the air which operates to make the necessary draught through the space outside of the scourer is that which comes through the holes in the upper end of the scouring shell, and which holes are at the end opposite the outlet. This description of the defendant's machine shows plainly that it infringes the first claim of the plaintiffs' patent. It embodies, in combination, all the elements which make up such first claim, and they are combined in substantially the same way and for the same purpose, and they have the same combined mode of operation, as in the plaintiffs' machine. The differences are formal and not substantial, so far as regards the plaintiffs' combination. Reversing the direction of the current at first, and carrying the refuse out of the chamber through an opening in the inner wall, and then through the auxiliary fan, into another upward passage, to reach the main fan, and bring-

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ing the increased supply of air into the inside of the scourer, and through the perforations into the annular space, is no change from the principle of the construction and operation of the plaintiffs' combination. In both machines, the auxiliary air inlets are at the farthest point from the outlet into the draught passage which leads to the fan. In both, the refuse is discharged through the perforations, and then, by a current induced in the annular space, is carried to the fan without again coming in contact with the grain. If there be any advantage or improvement in the modifications introduced by the defendant, still they are subordinate to, and embody and infringe, the plaintiffs' combination. Nor is this view affected by the fact that the defendant's beaters are not attached to a solid cylinder, as are the plaintiffs', and that by reason of their arrangement, and of other minor details, the grain may be more perfectly scoured in the defendant's machine than in the plaintiffs'.

In regard to the second claim of the plaintiffs' patent, the defendant's machine has two wind trunks arranged side by side, each provided with a separate valve or regulator, and each effecting the three separations set forth in the plaintiffs' specification, namely, first, of full grain, second, of cheat and light grain, and third, of refuse, the refuse being conducted into the eye of a suction fan, which is arranged above and on the same shaft with a scourer, both wind trunks being connected with the fan, and the scourer having a perforated case which operates to separate the greater portion of the refuse as it is detached from the grain, and the arrangement of the wind trunks, in the combined scourer and grain separator, is substantially the same, and operates in substantially the same manner, and accomplishes substantially the same results, as the arrangement covered by the second claim of the plaintiffs' patent. The difference in shape of the chess hopper in the defendant's wind trunk, the projecting forward and curving downward into the chess hopper, of the bottom board of the horizontal part of the wind trunk, in the defendant's machine, the regulating valve in the wind trunk, in the defendant's machine, and other minor modifications which are alleged to effect a more perfect separation in the defendant's

machine, if improvements, do not relieve the arrangement from the charge of infringement.

Howes and Throop, on the 27th of January, 1855, filed in the Patent Office an application for a patent for an "improved separator and smut machine." The application was sworn to by Howes on the 2d of January, 1855, and by Throop on the 22d of January, 1855. The model was filed on the 28th of February, 1855. The drawings accompanying this application were, in all substantial and material particulars, like the drawings of the reissued patent sued on, except that there was no drawing, figure 4, of a horizontal section. The specification in such application states the invention as follows : " This invention relates to a new and improved separator and smut machine, and consists, 1st, in a peculiar arrangement of the blast spouts, as will be hereafter fully shown, whereby the grain is subjected to two blasts, one before entering the scourer or smut mill, and the other after leaving the scourer or smut mill, and all dust, chaff, smut, straw, chaff and imperfect or light grain is thoroughly separated from the sound or heavy grain, and the chaff and imperfect grain is also separated from the dust and trash. 2d. The invention consists in the peculiar arrangement of the fan in relation with the blast spouts and scourer or smut mill, or the box which incloses it, as will be hereafter fully shown, whereby all the dust that enters the machine is drawn into the fan box and ejected therefrom, thus keeping the grain, both the sound and the light, perfectly clean and free from dust." The specification describes, and the drawings show, the perforated shell ; the cylinder within the shell, with beaters on it ; the fan, in a case and with a discharge spout ; the passages leading from the upper part of the chamber outside of the perforated shell to the lower part of the fan case ; the curved trunk, divided by a vertical partition into two compartments, which communicate with the fan case ; the slides to regulate the force of the blast ; the horizontal bottom plate in the wind trunk ; the spout leading into the inside of the scourer ; the spout leading out of the scourer ; the close outer case around the shell ; and the auxiliary air inlets through the bottom of the outer case. The specification states, that the grain to

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be cleansed and separated passes through a hopper and a spout into the scourer ; that, as the fan rotates, a blast passes upward between the shell and the outer case, and through the draught passages into the fan case, in consequence of a vacuum being formed in the fan case by the rotation of the fan, the air entering through the apertures at the lower part of the outer case ; that a blast is also generated by the same cause in the wind trunks ; that, consequently, as the grain passes to the scourer, it is subjected to a blast, and all loose dirt and smut, straw and light chaff passes up the first wind trunk, and the dirt, smut and light particles are drawn into the fan case through the opening at its eye, while chaff, being heavier, is not controlled by the blast and passes downward in the first wind trunk and out at its lower end ; that the grain is thus separated from loose impurities or foreign matter before entering the scourer, and, in passing through the scourer, all smut is broken or pulverized, and dirt, etc., is thoroughly removed from the grain and passes through the perforations in the shell into the space between the shell and the outer case, whence it is drawn up into the fan case and ejected through the discharge spout ; and that the grain passes from the lower end of the scourer into a spout, by which it is conducted into the lower end of the second wind trunk, the heavy and sound grain falling from the spout, while the smut, dirt, etc., which was scoured from the grain while passing through the scourer and escaped through the perforations in the shell, is carried up the second wind trunk, drawn into the fan case through its eye, and ejected through the discharge spout. This specification calls the tight case which surrounds the shell, a box. The draught passages or air pipes which pass from the chamber outside of the scourer to the fan case, it calls spouts. The compartments in the wind trunks it calls blast spouts. It proceeds : " Thus it will be seen that the grain may be thoroughly cleansed and separated, the sound grain and chaff being kept distinct or separate from each other, and the dirt, smut, etc., being removed from both." The inventors, in the claim, claim, first, the trunk, divided into two compartments or spouts, and arranged specifically as shown, with the fan, so that the grain will be

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subjected to two blasts, generated by one and the same fan, to one before entering the scourer and to the other after leaving the scourer, "and the chess or light grain separated from each other, and the dust, smut, etc., from both," the dust being drawn into the fan case and ejected therefrom ; second, connecting the fan case with the box which contains the scourer, and also connecting the fan case with the two blast spouts, as shown and described, "whereby all dust that enters the machine is drawn into and ejected from the fan case, and thereby prevented from mixing with the cleansed grain." On the 8th of March, 1855, this application was rejected by the Patent Office. The letter of rejection said : "For substantially the same arrangement of devices, see the patent grain scourer and separator of Benjamin Rutter and Henry Rouzer, October 4th, 1853." On the 11th of June, 1856, Howes and Throop filed in the Patent Office a paper signed by them, in which they said, addressing the Commissioner of Patents : "We hereby withdraw our application for a patent for improvements in grain separators, now in your office, and request that twenty dollars may be returned to us by mail, agreeably to the provision of the act of Congress authorizing such withdrawal." The paper also requested that the money should be sent to the address of Throop, at Chicago. It was sent to him by the Patent Office, by mail, on the 11th of June, 1856. The withdrawal was made for the purpose of filing a new application. The application of 1855 was made through Munn & Co., as agents. In the fore part of June, 1856, Howes went to Washington city to look after the matter. He there consulted Mr. Everett, a patent agent, who examined as to the cause of the rejection, and advised that the application should be withdrawn and a new one made. Howes directed Everett to have the application withdrawn, and to prepare a new specification and send it, with the drawings, to Throop and himself. Everett told Howes at that time that the drawings and model used in the application of 1855 could be used, or had better be used, in making the new application. In consequence of neglect on the part of Everett, arising from a difficulty between himself and his partner, or otherwise, the new specification was not

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sent to Howes and Throop, to be sworn to, until April, 1857. It was sworn to by Throop on the 16th of April, 1857, and by Howes on the 23d of April, 1857, and Howes then sent it by mail to Everett, at Washington, with the money for his fee and the Patent Office fee, and a petition signed by both of them, and a power of attorney signed by both of them, appointing Everett their attorney and agent to alter or modify the specification and drawings in their application as he might deem expedient, and to withdraw the application should it be deemed advisable. Notwithstanding this, Everett did not file the application. Consequently, in the latter part of February, 1858, Throop went to Washington and saw Everett, and complained to him of the delay, and received as an excuse a difficulty between Everett and his partner. While Throop remained in Washington the application was filed, on the 26th of February, 1858, the model of the application of 1855 being used as the model for the new application. On this application a patent was issued March 16th, 1858, a full fee of \$30 having been paid to the Patent Office. The drawings of this patent were substantially identical with the drawings of the original application of 1855, and were, in all substantial and material particulars, like the drawings of the reissue, except that there was no drawing, figure 4, of a horizontal section. The specification says: "Our improvements relate to that class of machines which clean the grain, and also separate the heavy grain from light grain, cheat, etc., and remove from the various qualities the dust and other refuse, and thereby utilize much which would otherwise be wasted. The machine is constructed and arranged as follows: A is a rectangular frame, having a box or casing, B, within it, which surrounds a perforated concave or shell C, which is permanently secured concentric with the vertical shaft E, and the cylinder D. This cylinder is fixed to the shaft E, and is provided with several vertical radial projections or beaters *a*. The sides of the box B do not extend to the bottom board upon which the shell C is placed, but leave narrow openings *c*¹, for purposes to be hereinafter explained. The revolving shaft E is placed in the centre of the machine, supported in a box at *c* and by a step *b*. It receives its motion through the driving pulley P to which

the power is applied. Above the box B are placed two or more tubes, which open a direct communication with the fan case G and the space in the box B outside of the shell C. Within the case G, upon the upper end of the shaft E, is placed a suction fan F, composed of any suitable number of leaves connected by arms with the shaft E. J is a curved trunk or flue which extends over the fan case G. This is divided into two compartments, K and K¹, by a vertical partition L. The upper part of the fan case G communicates with both compartments by openings shown at a¹, where two slides, a², are placed to regulate the size of the opening. It has also an outlet H, which may be extended to another apartment, or to the outside of the building, to convey the dust and refuse ejected from the fan case. M is a horizontal plate which extends over the fan case G, within the trunk J, and in both compartments K and K¹. K extends downwards at one side of A nearly to the floor, while the opposite side extends downwards about half way. K¹ terminates at an inclined spout N, which leads into the space between the cylinder D and the shell C, and conducts the grain to be operated upon, from the hopper O. Q is an inclined spout leading from the bottom of the concave shell C to the lower part of the compartment or blast spout K, which is gradually narrowed down to that point. The shaft E, being put in motion in the proper direction and at the required speed, the fan produces powerful currents of air in the direction of the darts 1. The wheat or other grain passing from the hopper O through the spout N is subjected to the action of the upward current in K¹. This takes up smut balls, chaff, light grains, chaff, dust, etc., etc., and carries them over the plate M. The dust and light refuse pass in the direction of the darts 2 into the fan, whence they are ejected through the outlet passage H, while the heavier portion descends by its gravity and passes out at the valve V, which only opens when the accumulation overcomes the atmospheric pressure, which tends to keep it closed. The heavy but uncleaned grain passes, by its gravity, to the top of the revolving cylinder D, which distributes it equally by centrifugal force, as it falls into the mill. It is then subjected to the action of the beaters, which, by their rapid motion,

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not only rub the grains against each other and the perforated shell, but generate outward currents through the perforations, driving the smut and dust through into the space between the shell and its casing B, whence it is immediately taken up through the tubes I into the fan case and discharged through H, without again mixing with the cleaned wheat. It is highly important that the smut should not again come into contact with the grain after it has been cleaned or scoured, as much of it would again adhere, especially in damp weather, or if the grain is not thoroughly dry. The openings *c'* admit a supply of air to create, in connection with the fan, the necessary draught. The cleaned grain passes out of the mill through the inclined spout Q into the blast spout K, where it is met by an upward draught, which carries up all light stuff and refuse which may have escaped the previous operations, and treats it in a similar manner to that which passes through compartment K'." The claim is as follows: "The combination of the tubes I and the outer casing B, when so constructed and arranged in connection with the fan case G, as to prevent the smut, etc., from coming in contact with the cleaned grain, as herein specified."

The patent of October 4th, 1853, to Rutter and Rouzer, referred to by the Patent Office as the ground for the rejection of the application made by Howes and Throop in 1855, was a patent for a "machine for cleaning and separating grain." The specification of that patent says: "The objects of our invention are to thoroughly cleanse wheat, or other grain, of all impurities, and also to separate the imperfect grains (which are of some use for feed, etc.), from both the good grain and from the dirt. In the accompanying drawings Fig. 1 is a vertical section through the feed tube, etc. Fig. 2 is a vertical section through the discharging spouts. Fig. 3 is a horizontal section through the scouring cylinder and concave, *a* is a suitable frame, *b* is the feed aperture opening into a tube *c*, whose bottom is furnished with a funnel *g*, leading into a spout or hopper *d*. A directing board *e*, reaching down obliquely from the top of the tube, conducts the grain into the funnel *g*, while at the same time the straw, chaff and loose dust are driven up through the tubes on the other side

of the board *e*, and ejected as hereafter described. The grain from the tube falls first upon a curved and obliquely placed screen *f*, along which it spreads in descending, so as to give the greatest possible scope to the atmospheric action just spoken of. From the lower edge of the screen, the grain drops through the funnel *g* into the sloping hopper *d*, which conducts it through the floor *h* on to the top of a conical scouring drum *i*, and revolving within a case or shell *k*, fluted or corrugated as represented in the horizontal section. The grain, in descending through the annular space between the drum and case, is violently beaten between the wings *j* on the drum and the ridges *l* on the inner side of the shell. From the bottom of this space, the grain and dust, now effectually loosened and disengaged from each other, drop together into the lower end of the spout *m*, where, meeting with a sharp upward draught of air, the dust is at once drawn up through the spout, by the action of the fan hereafter explained, and the grain is scattered on a curved and sloping screen *n* similar to the one *f* at the entrance passage, and for a similar object, with reference, in this instance, to dust and light grain, rather than chaff. From this screen the good grain finally escapes at the lower entrance of the spout, which is narrowed just enough to give the rapidity or force of draught requisite to carry up the light grain and dust but to allow the good grain to descend. The draught is produced by a fan *o* of usual construction, revolving within a case *p*. This fan case communicates at its centre with an upper chamber *q*. This chamber has communication both with the entrance tube *e* and with the draught spout *m*; with the former by the aperture *r*, and with the latter by the circuitous channel *s*, *t*, *u*. The communication with the entrance tube is capable of being either partially or entirely closed by a damper *v*, according to the condition of the material being operated on, with respect to the quantity of chaff and other loose matters which it is desired to eject in the first instance, and also according to the amount of draught which is needed at the bottom of the draught spout, to carry up the light grain. These objects are still further facilitated by means of another damper *w*, by which the opening into the fan case may be enlarged or diminished, but never entirely closed. The

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draught spout *m* is continued along the top of the machine in the form of a channel *s*, whence the passage comes downwards and backwards at *b*, and the lighter particles, such as dust, etc., pass through the throat *u* and are drawn into and discharged by the fan, while the light grain, descending by its greater specific gravity, comes in contact with the ledge *x*, and, sliding down the incline *y*, escapes through the spout *z*. This spout is provided with two valves 1, 2 (one near its entrance and the other near its discharging end) for the purpose of modulating the discharge of the contents."

Howes and Throop, during the latter part of the year 1853, became agents, jointly, for the sale of territory and machines under the Rutter and Rouzer patent. The claim of that patent was this: "The narrowing of the spout near the grain-discharge *m*, in combination with the curved passages *s*, *t*, *u* and *z*, which receive and discharge at their respective apertures the light grain and trash taken from the grain-discharge aperture *m*." As such agents, they, in January, 1854, sold the right to the Rutter and Rouzer patent, for 15 counties in the western part of New York, to E. Montgomery & Sons, of Silver Creek, N. Y., for \$2,000. Pursuing their business of selling Rutter and Rouzer machines, they put up one of the machines on trial in a mill in Watertown, N. Y., and, finding defects in its working, they invented jointly and embodied in it, in actual working by early in June, 1854, the improvements claimed in the reissue. In the same month Throop went to Chicago and engaged in making machines with such improvements, and he continued to do so there and elsewhere until after the reissue was obtained. In the summer of 1854 Howes induced E. Montgomery & Sons to add such improvements to the Rutter and Rouzer machines which they were building. For two years from the spring of 1856 Howes was a partner with the members of the firm of E. Montgomery & Sons, under the name of Montgomery & Co., in making the machines with such improvements. He then sold out his interest to the other partners, and made an agreement with them, in pursuance of which, after the patent of March, 1858, was obtained, he assigned to them all his interest in it. Since that time Montgomery & Co., and their

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successors, Howes, Babcock & Co., the latter firm composed of the plaintiffs in this suit, of whom the patentee Howes is one, have continued to make and sell machines embodying the improvements patented in the reissue.

The Rutter and Rouzer machine was intended to make three separations—into good grain, imperfect grain, and refuse. It had a preliminary separator, in which, by the action of a fan, as the grain entered the machine and before it reached the scourer, the straw, chaff, and loose dust were blown out of it to some extent, while the grain descended by its greater weight, the refuse passing off through the eye of the fan. In the scourer the dust was detached from the grain by wings on a revolving drum, the shell or exterior case being fluted. The grain and detached dust fell together through a spout into the lower part of a subsequent separator, which was a wind trunk acted upon by the fan before named, and in which there was an upward draught, the effect of which was to draw up dust and light grain, and all but good grain, the latter going by gravity out of the machine. The arrangement of the upper part of the interior of the subsequent separator was such, that the action of the fan drew into its eye the dust and lighter particles, not grain, while the light grain passed entirely over and came out on the other side. This machine had no perforated shell surrounding the scouring drum. The smut and refuse which was detached from the grain in the scourer, passed out with it through one and the same spout in the bottom of the scourer, and was free to attach itself again to the grain. It was clearly a valuable improvement to perforate with holes the shell surrounding the revolving beating instrument in the scourer, and cause, by the action of the fan, the matter detached by the scourer to pass through such holes. To do this required that there should be a tight case around the shell, and that the space between the two should be connected with the fan in such manner, by a draught passage, that the detached matter in such space would pass out through the fan, and not again come in contact with the grain. To effect this result satisfactorily, the auxiliary air inlets were necessary. It was, also, undoubtedly, an advantage to make the preliminary separator alike in construction and ar-

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rangement to the subsequent separator in the Rutter and Rouzer machine. This is what Howes and Throop did. They placed side by side two separators or wind trunks, each like the subsequent separator in the Rutter and Rouzer machine.

The defence of a want of novelty in the inventions covered by the reissued patent of the plaintiffs is set up. In order properly to consider this question, it must be determined what is the proper construction of the claims.

The specification, in respect to the first claim, disclaims the mere combination, broadly, in a smut machine and grain separator, of an air passage connecting an inclosed space outside of a perforated scouring cylinder, with a fan. But the first claim is a claim to the combination with a suction fan, scouring mechanism, perforated inclosing shell and outer tight casing, of a draught passage connecting the chamber outside of said perforated shell directly with the fan case, said passage being provided with auxiliary air inlets or openings, when the combination is arranged substantially as is described in the specification, and for the purpose set forth therein. The specification requires that the arrangement shall be such that the particles of smut and other impurities, after they are detached from the grain and drawn or forced through the perforations of the cylinder, will be removed and conducted to the fan, without commingling with or again coming in contact with the scoured grain. To effect this result requires an adequate arrangement of the air passages which furnish air for the blast through the draught passage to the fan, so that there may be a sufficient supply of air for the purpose. It is plain that no such combination is shown in the Rutter and Rouzer patent. It shows no perforated shell surrounded by an outer tight casing, and no draught passage such as the plaintiffs', and what is scoured off from the grain in the scourer leaves the scourer with the grain and not through a separate exit for itself, and, therefore, has an opportunity to re-attach itself to the grain.

The patent granted to Nelson Platt, May 20th, 1851, for "improvements in smut machines," is adduced to destroy the novelty of the plaintiffs' first claim. The machine shown in that patent appears to be a very complicated arrangement, and

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there is no evidence to show that it ever was or could be a practically useful machine. It has, abstractly, a suction fan, a scouring mechanism, a perforated shell, an outer tight casing, a draught passage connecting the chamber outside of such shell with the fan case, and air inlets for supplying air to such chamber and such draught passage. But these various parts are combined and arranged and operate in a manner not substantially the same as the combination in the first claim of the plaintiffs' patent, and for a purpose not substantially the same. The operation of the Platt machine is not such as to prevent the smut and dust which have been scoured from the grain from again coming in contact with the grain. On the contrary, in the Platt machine, smut and dust which have been detached come in contact with the grain.

The patents granted to Bedwell in October, 1854, to Horton in November, 1856, and to Canby in May, 1857, are subsequent in time to the date of the inventions of Howes and Throop, and the inventions shown in the patents granted to Bone in June, 1854, and to Sanders in June, 1854, are not shown to have been made and perfected earlier than the date at which the inventions of Howes and Throop were perfected. No earlier dates than the dates of those patents are assigned to the inventions described in them, even if those inventions could be regarded as the same as those of Howes and Throop. The rejected applications for patents put in evidence are, of themselves, no evidence of the existence of perfected inventions at the dates of the filing of the applications, in the absence of any other evidence of the construction and operation at those dates of machines embodying the inventions described in such applications, and those dates are dates subsequent to the date of the perfecting of the inventions of Howes and Throop.

As to the second claim of the plaintiffs' patent, the specification of the reissue states that the patentees do not claim broadly the combination of two wind trunks for effecting a preliminary and subsequent separation in a machine composed of a smut machine and a grain separator combined. The Rutter and Rouzer machine was a combined smut machine and grain separator, and it had two wind trunks, which

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effected a preliminary and a subsequent separation. But the second claim of the plaintiffs' reissue states that they claim, "in a combined scourer and grain separator, the arrangement of two wind trunks side by side, in the manner shown and described, and for the purpose hereinbefore set forth." It is true that the preliminary separator in the plaintiffs' machine, is, in and by itself, like the subsequent separator in the Rutter and Rouzer machine, and the subsequent separator in the plaintiffs' machine is, in and by itself, like the subsequent separator in the Rutter and Rouzer machine. But the arrangement and operation of the two wind trunks, in respect to the material operated on, in connection with and in reference to the grain scourer, involve novelty over and beyond anything that is found in the Rutter and Rouzer machine. The invention covered by the second claim of the plaintiffs' patent cannot be regarded as a mere duplication of the subsequent separator in the Rutter and Rouzer machine. The claim is one to the arrangement side by side, of two wind trunks, such as those described, in connection with a scourer, substantially as described, in such manner that there will be a preliminary separation into three parts of the material fed into the first wind trunk, substantially in the manner and by the means described, with means of regulating the air current in such first wind trunk by an independent damper, and so that the grain will then pass through the scourer and enter the second wind trunk, and be there operated upon for a separation of the material into three parts, substantially in the manner and by the means described, with means of regulating the air current in such second wind trunk by an independent damper, the air currents being produced by a suction fan arranged on the same shaft as, and above, the revolving beaters in the scourer, and with a divided eye into which the two wind trunks discharge. On this construction of the claim, it is not anticipated by what is found in the Rutter and Rouzer patent, or in the Platt patent, or in any of the other patents or applications adduced by the defendant.

In so far as the third claim in the application for a patent filed by Montgomery and Howes in January, 1857, covers anything now claimed by Howes and Throop to have been

invented by them previously to that application, it is quite apparent, on the whole evidence, that such third claim was inadvertently made, and without any design on the part of either Montgomery or Howes to make it, and without any consciousness on the part of either of them that it was made.

The construction and arrangement covered by the claims of the reissued patent are fully shown and described in the specification and drawings of the original application, and in those of the original patent. This appears clearly by a perusal of those papers, as above set forth. Therefore, there is no foundation for the assertion that the reissued patent is invalid because it claims what is not shown or described in the original patent.

It is contended for the defendant, that Howes and Throop, by withdrawing, in June 1856, the application which they had before made, and, by not filing a new application until February, 1858, abandoned their invention to the public, and consented to its use by the public for more than two years before February, 1858; and that, therefore, their patent of March, 1858, was invalid. But the facts shown, as before recited, demonstrate that there was no abandonment and no consent to public use. There was, in judgment of law, a continuous application. The direction to withdraw was accompanied by a direction to renew. The old model was used, as previously filed, for the new application. The party cannot be made to suffer for the neglect of his attorney. There is no evidence of any intention to abandon, or of any act of abandonment, or of any declaration of abandonment, or of any consent to, or allowance, of public use, or of any such laches on the part of the patentees, as can amount to an abandonment, at any time prior to February, 1858. The case falls, I think, within the principles determined in *Godfrey v. Eames*, 1 Wallace, 317, and *Smith v. Goodyear Dental Vulcanite Co.*, 3 Otto, 486.

The evidence satisfactorily establishes that the defendant was engaged in manufacturing, prior to the bringing of this suit, machines embodying the patented inventions.

There must be the usual decree for the plaintiffs for an

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injunction as to both claims of the patent and for an account of profits.

Sprague & Hyatt, for the complainants.

William S. Farnell, for the defendant.

JAMES W. HERRING ET AL.

vs.

WILLIAM G. GAGE ET AL. IN EQUITY.*

The findings of the master, in ascertaining the profits made by the defendants, in infringing letters patent, sustained.

The case of *Mowry v. Whitney*, 14 Wall., 620, explained.

In the present case, it was held, that the proper inquiry was, not what saving the defendant had made by using the patented device, over the saving which he might have made if he had used any or all of various other devices, but what saving he had made directly by using the patented device.

Interest on the cost of a device, and the cost of power, are to be allowed as deductions from profits, only when it is shown they have been paid or incurred as debts.

A defendant cannot avail himself of the defence that he has not marked or labelled the infringing machines as patented, and especially so when no such defence is set up in the answer.

In a suit against three defendants, it is proper to award against all three the profits made by them jointly, while partners, and against two of them the profits they made after their partnership with the third defendant was dissolved, and while they were using the patented invention in conjunction with a fourth person, not a defendant.

(Before WALLACE, J., Northern District of New York, August, 1878.)

WALLACE, J.

This case comes here upon exceptions by both parties to the report of the master to whom it was referred, by interlocutory decree (14 Blatchf., C. C. R., 293), to take proofs and

* 15 Blatchf., C. C. R., 124.

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ascertain the profits received by the defendants from the use of the device described in the first claim of the letters patent as reissued to John Deuchfield, January 16th, 1872, being for an improved arrangement of means for cooling and drying meal. The master has found, that the defendants have used the device from January 16th, 1872, and, by the use of the device, have saved flour to the amount of one barrel to 600 made, and that, for the period between April 1st, 1872, and May 10th, 1876, the saving was, in all, $191\frac{11}{16}$ barrels, of the value of \$1,441.84. He also finds, that, after May 10th, 1876 (at which time the defendants dissolved partnership), two of the defendants, William G. Gage and Frederick A. Gage, continued to use the device until November 1st, 1876, and that these two defendants, in conjunction with one Henderson, continued to use it from November 1st, 1876, until October 3d, 1877. The flour saved by the use of the device after the defendants dissolved partnership, and up to October 3d, 1877, was $57\frac{7}{16}$ barrels, of the value of \$376.97. The master had also found, that this saving accrued to the defendants over and beyond any saving which they could have obtained from any other successful device for cooling and drying meal, known and open to use by them. He has deducted the cost of introducing the device into the defendants' mill and the cost of keeping it in repair, and ascertained the profit actually made after such deduction. He has allowed the complainants, however, only the profits made by the defendants down to May 10th, 1876.

The first exception of the defendants raises the point, whether the master's report is sustained by the proofs, as to the time when the defendants commenced to use the Deuchfield device. The proofs show a conflict as to the fact whether the device was introduced into the Riverside Mills (the defendants' mills) prior to 1873-4, but the unequivocal statement of the defendant William G. Gage is sufficient to justify the conclusion of the master, and I am unable to say that it should not prevail over the testimony of his miller, and the other testimony that might justify a different finding. This exception is, therefore, overruled.

The next exceptions of the defendants allege that the master

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has erred in stating the account between the parties as to the number of barrels of flour manufactured by the defendants during the period in question, and as to the price received for flour manufactured. The defendants neglected to state an account of the number of barrels of flour manufactured, or of the price received by them, for the period between January 16th, 1872, and April 1st, 1872, and the master has failed to report upon the number of barrels manufactured during this period. The master had a right, in the absence of a statement by the defendants, to assume that they manufactured, during this period, at the same rate as during the rest of the year, and if, acting on that assumption, he had charged them with the proportion that period bears to the entire year, they would have been charged with a larger sum as profits than they are now charged with, assuming that the master has erred as claimed. It would not benefit the defendants if the report were sent back for revision, and the error pointed out by the exceptions is of inconsiderable moment. The master's error costs the defendants something less than \$30, but, if he had charged them with the product between January 16th, 1872, and April 1st, 1872, it would have amounted to over three times that sum. The defendants also overlook the fact that there was other evidence before the master of the product of the mill than that contained in the account rendered by the defendants. These exceptions will, therefore, be disregarded.

By further exceptions, the defendants insist that the master's findings, as to the actual savings realized by the defendants by the use of the device, is not sustained by the evidence. This finding is based, in part, upon the testimony of various experts, who were familiar with the practical working of the device in other mills, and who were permitted to state the quantity of flour lost when the device was not used, thus estimating the saving realized under their observations, and basing upon that their opinion of the saving ordinarily gained by the use of the device. The conditions under which the device was used differed in the different instances observed by the witnesses. It is contended that this testimony is not entitled to consideration. To this I cannot agree. Of

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course, the ultimate inquiry was only as to the saving made by the defendants. It was impracticable to ascertain this by direct evidence, because the defendants did not keep any account relative thereto. They and their witnesses gave their opinions, with the data upon which they were based. The complainants gave the best evidence which was attainable from the nature of the case. It was peculiarly the province of the master to sift out what was valuable, and reject what was not, and, by an analysis of the testimony, to ascertain what the saving would be when the device was used under conditions similar to those which obtained in the defendants' mill. I am not satisfied that he has not done this with discrimination, and am not convinced that the defendants have any ground of complaint.

The next exception of the defendants brings up what I deem the most important question in the case. A large amount of testimony was given tending to show that other devices were known, were open to use, and had been used by millers, which were an equivalent for the Deuchfield device, and by the use of which a saving would result equal to that realized by the use of the complainants' device. The master has found that the saving made by the defendants was over and beyond that which they could have made by the use of any other device, and the defendants insist that this finding is not supported by the proofs. The answer to this, in my judgment, is, that the exception rests on a misconception of the rule of law by which the profits, in such a case, are to be ascertained. It is said, in *Mowry v. Whitney*, 14 Wall., 620, 651, that the question to be determined, in finding the profits made by an infringer, by the use of the patent infringed, is, "What advantage did the defendant derive from using the complainant's invention over what he had in using other processes then open to the public and adequate to enable him to obtain an equally beneficial result;" and this language, probably, has given rise to the theory by which both the complainants and the defendants have been governed in the production of their testimony, and which has also been adopted by the master. As a consequence, a vast amount of time has been devoted, by the complainants and the defendants, in producing testi-

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mony relative to the efficiency and value of the various devices which the defendants might have employed for the cooling and drying of meal, as a substitute for that of the complainants, and the comparative merits of each with the complainants' device, with a view to ascertain what additional saving was made by the use of the complainants' device, beyond that which might have been made had the defendants used any or all of the various other devices.

In settling an account between a patentee and an infringer, the real inquiry is : What is the advantage which the infringer has derived from his use of the invention ? If he has derived a profit attributable directly to the employment of the invention, that profit belongs to the patentee and is the measure of his recovery. Here, the defendants saved a considerable quantity of flour by the use of the complainants' property, which, until they used it, had been lost. Their gain is directly traceable to the use of the invention. How is it important to ascertain what they might have saved, if, instead of using the complainants' property, they had used some other device ? How are they in a better position than they would be if there had been a different device which was patented, and they had acquired the right to use it from the patentee, but, instead of using it, saw fit to employ the complainants' device ? *Mowry v. Whitney* was a case where the entire profit of the manufacture of an article made by the patented process was given upon an accounting, when that profit was largely due not to the advantage derived from the patented process but from that of other processes actually used by the manufacturer, and which he had the right to use ; and what was said in that case, pertinent to such a state of facts, is not to be assumed as the enunciation of the rule where the profit has been made directly by the use of the patentee's device. Such a rule would impose an extraordinary burden upon a patentee, because it would require him, when seeking for redress, to explore the whole realm of practical and theoretical mechanism, to ascertain and demonstrate that what was realized by the wrongful appropriation of his invention could not have been made by the use of any other device or substitute which the infringer might have employed. The infringer is, at the

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election of the patentee, treated as a trustee, and, as such, required to account for the profits actually made by the use of the patentee's property. It would be a novel defence to permit a trustee who has made a profit by the use of the money or property of his *cestui que trust*, to show that he would have made an equal profit if he had used the money or property of a third person, or if he had used his own money or property. It was quite unnecessary, in my judgment, to enter into any investigation of the savings which the defendants might have realized if they had used some other than the complainants' device, and the exception to the master's finding upon the question cannot avail the defendants.

Further exceptions of the defendants present the questions whether the master erred in not deducting the interest on the cost of the device from the aggregate of profits, and also in not deducting the value of the power employed in using the device. Undoubtedly, interest and cost of power enter into the account of profits to be ascertained from a given manufacture. Profit is the gain made upon any investment when both receipts and payments are taken into the account. Where interest has been paid upon the capital invested, or where it is to be paid upon borrowed capital, it should be allowed in estimating profits; but I am not aware of any rule which requires that it should be deducted where it has not been actually paid or incurred. The allowance for cost of power is to be determined by the same rule. If expense has been actually incurred for power, it should be deducted. But, if interest or expense for cost of power has not been incurred, there is no more reason why there should be a deduction therefor from the profits, than that there should be for the personal service of the infringer in conducting the business. It was not shown that any interest, or any sum for cost of power, had been paid, or any indebtedness incurred therefor. The master was correct in not making any such allowance.

It is insisted, in the argument for the defendants, that no damages are recoverable, because the device was not labelled or marked as patented, under section 4,900 of the Revised Statutes. The statute has no application to a case like

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this, where the defendants were themselves the persons who made and used the device. If it had, the defendants cannot avail themselves of the defence, because they have not set it up in their answer. *Rubber Co. v. Goodyear*, 9 Wall., 788.

This disposes, in substance, of all the exceptions of the defendants. In conclusion, it is proper to say, that the proofs show a case where it is peculiarly proper that the court should repose upon the master's findings upon the facts. Such is the conflict between the witnesses upon nearly all of the issues entering into the question of the amount due the complainants, that while I should have been better satisfied if the profits had been estimated at fifty dollars per annum for each run of stones using the device, it would be quite unsafe to say that the master has not arrived at judicious and correct conclusions. The defendants' exceptions are overruled.

The complainants insist, by their exceptions, that they are entitled to recover not only the profits made by the defendants during the time all of them were using the device, but, also, as against the defendants William G. Gage and Frederick A. Gage, the further amount made while they were using the device jointly or in conjunction with Henderson. In this I think they are correct. The defendants are tort-feasors, and each is liable for the whole damages. The right of the party injured to look to either as well as to all of the defendants for the whole damage he has sustained, is not confined to a resort to a court of law, but is recognized and enforced when he resorts for his remedy to a court of equity. It is the peculiar province of equity, when it has acquired jurisdiction of the subject matter of a controversy, to award in the suit full and complete relief between all parties. The master has found the net profit arising from the use of the device by William G. Gage and Frederick A. Gage, down to the date of the order of reference, October 3d, 1877, to be \$281.97, in addition to the profits which accrued to all the defendants jointly. This should have been allowed to the complainants, and is now allowed.

The decree will provide for a recovery for the complainants, as against all the defendants, of the sum of \$1,161.84, and as

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against the defendants William G. Gage and Frederick A. Gage, of the further sum of \$281.97.

Edwin S. Jenney and James A. Allen, for the complainants.

H. C. Howe, for the defendants.

 THE UNION PAPER BAG MACHINE COMPANY ET AL.

vs.

THE PULTZ AND WALKLEY COMPANY ET AL. IN EQUITY.*

The first claim of the letters patent granted to William Goodale, July 12th, 1859, for improvements in machinery for making paper bags, and extended for seven years from July 12th, 1873, namely: "Making the cutter which cuts the paper from the roll or piece, of the form herein described, that, in cutting off the paper, it also cuts it into the required form to fold into a bag, without further cutting," is valid.

Knowledge of prior experiments by another, will not defeat the claim of the patentee to an invention, if it appears that, after those experiments were abandoned, he first perfected and adapted the invention to actual use.

The patentee has the right to take up the improvement at the point where it was left by his predecessor, and if, by the exercise of his own inventive skill, he is successful in first perfecting and reducing to practice the invention which his predecessor undertook to make, he is entitled to the merit of such improvement, as an original inventor.

Declarations of a patentee and former owner of a patent, undertaking to restrict the invention within a narrower compass than that stated in his specification, will not be allowed to vary the construction which would otherwise be given to the patent.

The invention of Goodale was not simply a knife which would cut without waste, or which would produce the exact form of blank described in the specification, but was a machine having a cutter of five planes, which, by a transverse cut across a roll of paper in the flat sheet, cut the paper into the required form to fold into a paper bag without further cutting out, the form of the blank being substantially the form given in the specification.

* 15 Blatchf. C. C. R., 160.

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A machine having a knife of the irregular form of the Goodale cutter, which cuts the paper into the required form to fold into a bag, without further cutting out, is an infringement of the first claim of the Goodale patent, although such knife has an additional parallel blade at each end of it.

Nor does the removal of the central cutting portion of such knife about a bag's length in advance of the side cutters, cause the machine to be no infringement, the cutters which remove side pieces of paper from the roll remaining the same.

It required invention to make a knife which would cut from a roll of paper in the flat sheet, by one cut, a blank which could be folded into a bag without further cutting out.

(Before SHIPMAN, J., District of Connecticut, August, 1878.)

SHIPMAN, J.

This is a bill in equity founded upon the alleged infringement by the defendants of the first claim of the letters patent dated July 12th, 1859, which were granted to William Goodale, for improvements in machinery for making paper bags. Said letters patent were extended for the term of seven years from July 12th, 1873. The patentee, on July 14th, 1873, assigned all his interest in the patent to The Union Paper Bag Machine Company. The other plaintiffs are the exclusive licensees of said assignees, to use the improvement within certain territory, including the State of Connecticut. The answer denies that the patentee was the original and first inventor of the alleged invention, and also denies that, upon any proper construction of the patent, the defendants have infringed, and avers that the patent was surreptitiously and unjustly obtained for that which was in fact invented by another, who was using reasonable diligence in adapting and perfecting the same, and that the alleged improvements were not the product of inventive ingenuity, but were due to mechanical skill merely.

The specification says, that the invention which is the subject of the first claim consists "in making the cutter which cuts the paper from the roll or piece, of the peculiar irregular form hereinafter described, whereby it is caused, by the operation by which it cuts the paper from the roll or piece, to give it the form hereinafter specified, which permits it, without further cutting out, to be folded into a bag." The form

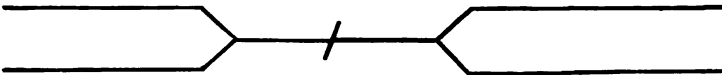
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of the cutter will be understood by the following representation of the cut which is made in the paper :



By the stroke of the cutter, a projection is left in the centre of one end of the blank, which forms, when the side lips are folded together, a lap to cover the mouth of the bag. A depression is left in the centre of the other end of the blank. When the side lips of the blank are folded together, they lap over to make the seam down the middle of one side of the bag, and the two projections at the lower end of the side lips combine, when folded on the opposite side to the central seam, to form a lap and thus to make the bottom of the bag. The top flap is upon the seam side of the bag, and the bottom flaps are upon the reverse side. The first claim of the patent is for "making the cutter which cuts the paper from the roll or piece, of the form herein described, that, in cutting off the paper, it also cuts it to the required form to fold into a bag, without further cutting out."

The cutter which was used by the defendants prior to the commencement of the suit was of the following form :



It appears, by a stipulation of the parties, that, afterwards, the "defendants employed cutting devices like those previously employed, so far as they removed side pieces of paper from the roll, and then severed the paper by a straight cutter near the end pasting device, and a bag's length in advance of the side cutters above referred to."

The effect of either system of the defendants' cutters is to cut a projection at the centre of each end of the blank. When the two side lips are folded over to form a central seam down one side of the bag, the two end flaps are likewise folded over upon the same side, and form respectively the top and bottom of the bag, and thus all the seams are upon the same side. The Goodale cutter produces no waste. The

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paper which is severed between the two blades at the right and left extremities of the defendants' cutter is a waste piece of paper.

As in many other cases, the question of infringement depends much upon the construction which is given to the patent. The defendants insist that, properly construed, the first claim is for a knife having five planes, for producing the blank described in the patent without waste of material, that is to say, a blank in which the two lower ends of the side lips combine to form the bottom lap, or a blank having a projection at one end and a corresponding depression at the other end.

In order to ascertain the proper construction of the patent, it is important to know the nature and extent of the invention which was made by the patentee. Upon the question of novelty, the defendants have not relied upon any of the devices or patents which are mentioned in the answer, but they say, *first*, that William Goodale, the patentee, borrowed the invention from his brother, E. W. Goodale, who is not named in the answer, and, *secondly*, that, if the E. W. Goodale machine cannot be used as an anticipatory invention, to defeat the patent, it can properly be used to show the state of the art at the time of the William Goodale invention.

On July 25th, 1856, E. W. Goodale, the brother of the patentee, made an application for a patent for an improvement upon a bag machine which he had theretofore invented, which application was rejected. A small model, containing the alleged improvement, was sent to the Patent Office. This model contained the same form of cutter, the "three cutter method," which is now used by the defendants. E. W. Goodale never constructed a machine of full size like his model, and never made or sold bags like those which could have been made upon such a machine. William Goodale worked for his brother from 1854 or 1855 to 1859 or 1860, and knew of the model and the invention which was specified in the rejected application, and testifies that his, William's, object in shaping his knife was to cut the paper without waste. E. W. Goodale purchased the William Goodale patent, and constructed machines like those described therein, and manu-

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factured bags upon such machines. It does not appear that he ever undertook to perfect his model after the application was rejected. His idea was never reduced to practice, and was never embodied in an operative machine, and upon the rejection of his application, he seems to have abandoned his inchoate invention, and afterward to have manufactured bags under the subsequent patent of his brother. About a year after the rejection of the application, William Goodale first thought of attempting to construct a new machine.

Seasonable objection was made by the plaintiffs to the admission of this testimony, if it was offered to prove that the patentee was not the original inventor of the thing patented, upon the ground that neither the invention of E. W. Goodale, nor his use of the invention, nor his name, as one who had a prior knowledge of the thing patented, were mentioned in the answer. It has frequently and uniformly been held that such testimony is not admissible to show that the patentee was not the original inventor of the thing patented. *Agawam Co. v. Jordan*, 7 Wall., 583; *Railroad Co. v. Dubois*, 12 Wall., 47. But, as the testimony is relied upon in order to affect the construction of the patent, it is necessary to state what it proves. The E. W. Goodale model was an experiment which rested in theory alone, and was never reduced to practice, or brought into use, and was abandoned by the alleged inventor. If an alleged prior invention "was only an experiment and was never perfected or brought into actual use, but was abandoned and never revived by the alleged inventor, the mere fact of having unsuccessfully applied for a patent therefor, cannot take the case out of the category of unsuccessful experiments." *The Corn Planter Patent*, 23 Wall., 181, 211. It is, however, said, that William Goodale knew of this model and of this invention before he commenced his own experiments, and, therefore, was not an original and independent inventor. Knowledge of prior experiments by another will not defeat the claim of the patentee to an invention, if it appears that, after those experiments were abandoned, he first perfected and adapted the invention to actual use; but he will not be an original inventor, and his claim to originality will be defeated, if the knowledge or informa-

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tion which he derived from the abandoned models or experiments was sufficiently definite and clear to enable him to construct the improved thing which was the subject of his alleged invention. *Washburn v. Gould*, 3 Story, 122 ; *Judson v. Moore*, 1 Fisher, 544 ; *Pitts v. Hall*, 2 Blatchf., C. C. R., 229. It is plain, that the cutter of William Goodale was, in its completed and perfected state, a simpler and more economical cutter than the one shown in the E. W. Goodale model. It proved that the patentee had exercised invention. Having attained success by such exercise and by his skill and ingenuity, he was entitled to the position of an original inventor, and he rightfully obtained a patent for his improvement.

Admitting this to be true, the defendants now ask what was his improvement, and they say that the model and the rejected application of E. W. Goodale, and the patentee's knowledge of his brother's invention, so far as it had progressed, are important facts showing the state of the art at the date of the patentee's invention, and showing that his actual invention was of a very limited character. Such facts are admissible to show the circumstances connected with the invention, and the state of things existing at the time, and thus to enable the court to understand the subject matter of the patent, and to throw light upon its proper construction, and may be very important. The patentee, is not, however, necessarily limited, in his patent, to the narrow field between the model of his predecessor and his own perfected machine, for, his invention may have actually covered a wider field, and may have included the territory which the previous investigator undertook to occupy and abandoned. The patentee has the right to take up the improvement at the point where it was left by his predecessor, and if, by the exercise of his own inventive skill, he is successful in first perfecting and reducing to practice the invention which his predecessor undertook to make, he is entitled to the merit of such improvement, as an original inventor (*Whitely v. Swayne*, 7 Wall., 685) ; and, if he is an original inventor of the improvement, he is entitled to the benefit of unsubstantial variations and modifications in form of the principle of his invention, notwithstanding such modifications may run into and include the forms of

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mechanism shown in the abandoned experiments of which he had knowledge, provided the invention is properly claimed and set forth in his specification.

To the testimony of the patentee that his object in shaping his knife "was to cut the paper without waste, without any reference or view to my brother's machine any way," I do not give much weight, if the answer is construed to mean that his sole or main object was to cut the paper without waste. Undoubtedly, one object was to avoid waste; but the patentee, in his specification, gave a wider scope to his invention. Nothing is said in the patent in regard to cutting the paper without waste. I am not willing to vary the construction which would otherwise be given to a patent, in order to conform to the declarations of a patentee and former owner, whereby he undertakes to restrict the invention within a narrower compass than that which he had previously stated in the specification.

Giving to the new testimony in regard to the state of the art its appropriate weight, I think that the invention of William Goodale was not simply a knife which would cut without waste, or which would produce the exact form of blank described in his specification, but that his place as an inventor is that which was stated in the opinion of the Supreme Court upon this patent. "Evidence of a satisfactory character is exhibited to show that the assignor of the complainants was the first person to organize an operative machine to make paper bags from a roll of paper in the flat sheet by a transverse cut across the same with a knife having five planes, so that the blanks, so called, when cut and folded, will present a paper bag of the form and description given in the specification and drawings of the patent." *Machine Co. v. Murphy*, 97 U. S., 120. The thing invented was an organized machine, having a cutter of five planes, which, by a transverse cut across a roll of paper in the flat sheet, cut the paper into the required form to fold into a paper bag without further cutting out, the form of the blank being substantially the form given in the specification. The form of the knife must be substantially "the peculiar irregular form" which was described. It must have the specified effect, that is, it must cut the paper

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into the form substantially specified, so as to be folded into a bag without further cutting out. The exact form of the Goodale blank when it was cut, and before it was folded, was not of the essence of the invention, provided it could be folded, without further cutting out, into a paper bag of the ordinary form ; otherwise, the patentee, who was the pioneer in the art of making paper bags from a roll of paper in the flat sheet, by a transverse cut across the same with a knife having five planes, had limited himself not only to a knife of the peculiar irregular form, but to a knife which should produce a blank of the precise shape, before folding, which his knife produced.

Neither did the patentee confine himself to a form of knife which should cut without waste. If another person should use a knife so near to the form of the patented knife as to embody its mode of operation, and to produce the same result of cutting a blank from a flat roll, so that it could be folded without further cutting out, he would be an infringer, notwithstanding his knife did not accomplish the work to as good advantage as did the patented invention. " The patentee having described his invention, and shown its principles, and claimed it in that form which most perfectly embodies it, is, in contemplation of law, deemed to claim every form in which his invention may be copied, unless he manifests an intention to disclaim some of those forms." *Winans v. Denmead*, 15 How., 330.

The defendants' knife has the five planes of the Goodale knife, with an additional parallel blade at each end of the cutter. The effect of these two parallel blades is to make the same projection at the top of the blank which the Goodale knife makes, but, by cutting out a waste piece of paper, to make, also, a projection at the other end of the blank, which forms the bottom flap ; whereas, the Goodale knife makes a depression, and the two end lips are turned over to make the bottom of the bag. The substance of the invention, the irregular form of the Goodale cutter, which cuts the paper into the required form to fold into a bag, without further cutting out, is found in the defendants' knife. The office which is performed by the cutter in such machine is substan-

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tially the same, and the variations in form or in function do not vary the principle of either cutter. If the E. W. Goodale knife had been the first perfected invention, the William Goodale knife, which omitted a parallel blade, and thereby effected a small saving in stock, would have been a patentable improvement, but would have been subsidiary to the original invention. The defendants' cutter, by cutting out a projection on each end of the blank, produces a bag which has a neater appearance than its rival has, but the work is done in substantially the same way and by substantially the same means, and the result is substantially the same.

Stress is laid, upon the argument, that the Goodale machine is organized in all its parts, with reference to the fact that the cutter is one which makes a projection at the top and an excavation at the bottom of the blank, and thus the fold of the bottom of the bag is upon the reverse side from the fold of the top. This is true, but this fact does not establish the defendants' position, that the essence of the Goodale invention was the exact form of his cutter. He had made a decided advance in the art, and his invention gave him a right to claim a cutter of substantially the form which he invented, notwithstanding the fact that the other parts of his machine, which turned and pasted the bottom flaps, were arranged with reference to the peculiar form of his blank. The defendants do not escape from the charge of infringement by the fact that, in order to accomplish the results attained by parts of the plaintiffs' machine other than the cutter, those parts had to be modified in order to meet the change which they made in the form of the cutter.

The defendants next insist that their "three cutter method" is not within the patent, even if the knife which they used at the commencement of the suit is an infringement. After a preliminary injunction had restrained them from the use of the knife as originally constructed, the defendants moved the central cutting portion of the knife about a bag's length in advance of the side cutters. This was a mere change of position, and was not a change of substance, and produced no new result.

It is not necessary to consider the defence, that the patentee

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surreptitiously and unjustly obtained the patent for that which was in fact invented by E. W. Goodale, as there is no evidence that he was using any effort to adapt and perfect his invention, and he had in fact given up all attempts to perfect it before the patentee took up the subject of the improvement.

The remaining defence is, that there was no invention in the cutter, but that the improvement was an exercise of mechanical skill only. The history of the art of paper bag manufacture, and of the various patents which have been granted for paper bag machines, shows that this is a theoretical defence. As a matter of fact, there was invention. The inventor was required to make a knife which should cut from a roll of paper in the flat sheet, by one cut, a blank which could be folded into a bag without further cutting out. That had not been done before, although paper bag machines are old, and have "been constructed by many persons and in various forms for more than twenty years, and with more or less utility." *Machine Co. v. Murphy*, cited *supra*.

There should be a decree for an injunction and an accounting in respect to the first claim.

George Harding, for the complainants.

Charles E. Mitchell and *Benjamin F. Thurston*, for the defendants

IRVIN A. WILLIAMS

vs.

THE ROME, WATERTOWN AND OGDENSBURGH RAILROAD
COMPANY. IN EQUITY.*

The reissued letters patent granted to Irvin A. Williams, December 19th, 1865, for an "improvement in locomotive lamps" (the original patent having been granted to him April 29th, 1862), are valid.

The claims of said reissue are for patentable combinations and not for aggregations.

The present case distinguished from *Hailes v. Van Wormer*, 20 Wallace, 353, and *Reckendorfer v. Faber*, 2 Otto, 347.

The question of infringement considered.

(Before BLATCHFORD, J., Northern District of New York, August, 1878.)

BLATCHFORD, J.

This suit is founded on reissued letters patent granted to Irvin A. Williams, December 19th, 1865, for an "improvement in locomotive lamps." The original letters patent were granted to him April 29th, 1862. The specification of the reissue says: "The object of my invention is to permit coal oil or kerosene to be used in lamps for locomotive head-lights with success and to obtain full advantage of its great light-producing capacity. In locomotive head-lights, it is important that the greatest amount of light should be concentrated in the smallest practicable space, in order that the light may be as nearly as possible in the focus of the reflector which throws it forward of the locomotive. It is also important, in lamps burning kerosene, that the flame should be protected from irregular currents of air, which tend to produce flickering. The first requirement has been attained to some extent by the use of a tubular wick from which the fluid burns, but

* 15 Blatchf. C. C. R., 200.

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the lamps in which such wicks were used did not contain instrumentalities which enable them to burn without smoke all the coal oil which such a wick is capable of supplying. The improvement which constitutes the invention or subject-matter of this patent consists of novel combinations of a circular hollow wick tube, by which I mean a wick tube suitable for holding a tubular wick and admitting air to its interior, with various other instrumentalities, which, when combined as hereinafter described, produce a lamp which is suitable for burning coal oil in a locomotive head-light, and is more efficient for that purpose than any lamp heretofore known, because it furnishes the greatest quantity of light from a wick of a given size, without material flickering. The first of these improvements consists of the combination of a circular hollow wick tube with a perforated air screen to regulate the passage of air to the exterior of the flame, and a cap deflector to form a combustion chamber above the wick, from the orifice of which chamber the flame issues in intimate contact with the exterior and interior currents of air, after it has formed above the wick within its combustion chamber and its carbonaceous constituents have obtained a glowing heat therein. The second improvement consists of the combination of the said circular hollow wick tube, perforated air screen for the exterior current of air, and cap deflector, with a lateral reservoir for the oil, by which I mean a reservoir so combined and arranged that the head from which the oil is supplied is at one side of the wick tube and above its lower end, whereby the reservoir can be placed outside of the reflector of the head-light, and the oil can nevertheless be supplied by gravitation at a level sufficiently near the burning part of the wick to keep it freely supplied with oil. The third improvement consists of the combination of the said circular hollow wick tube, perforated air screen for the exterior current of air, and cap deflector, with a button arranged above the orifice of the cap deflector, in such manner as to spread the flame after it issues from the orifice of the cap deflector, thereby lessening its height and confining it more nearly to the focus of the head-light. The fourth improvement consists of the combination of the said circular hollow wick tube, perforated air screen for

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the exterior current of air, and cap deflector, with a thimble wick holder for holding and moving the wick in the circular wick tube. The fifth improvement consists of the combination of the said circular hollow wick tube and lateral reservoir with a perforated air screen to regulate the passage of air to the interior of the flame or wick tube. The sixth improvement consists of the combination of the said circular hollow wick tube, perforated air screen for the interior current of air, and lateral oil reservoir, with the said cap deflector. The seventh improvement consists of the combination of the said circular hollow wick tube, cap deflector, and perforated air screen for the interior current of air, with a button to spread the flame, above the orifice of the cap deflector. The eighth improvement consists of the combination of the said circular hollow wick tube, cap deflector, lateral oil reservoir, and perforated air screen for the interior current of air, with a button to spread the flame, above the orifice of the cap deflector. The ninth improvement consists of the combination of the said circular hollow wick tube and cap deflector with perforated air screens for both the exterior and interior currents of air. The tenth improvement consists of the combination of the said circular hollow wick tube, cap deflector, and perforated air screen for the exterior current of air, with a close gallery to support the chimney, by which I mean a gallery combined with the other members in such manner that direct currents of air are not permitted to pass under the chimney and over the deflector, to cause the flame to flicker when the locomotive is in motion. The last of my improvements consists of the combination in a lamp of the following instrumentalities, viz.: the aforesaid circular hollow wick-tube, thimble wick holder, cap deflector, button, perforated air screen for the exterior and interior currents of air, and lateral oil reservoir. The lamp represented in the accompanying drawings embodies all my improvements, being an example of the best mode of embodying the invention known to me at the date of my application for the original patent. It has a circular hollow wick tube, C, composed of an interior cylinder *m* and an exterior cylinder *l*, which are separated by an annular space in which the tubular wick D is contained, but are connected

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together at their lower ends so as to retain the oil. This circular hollow wick tube is provided with a thimble wick holder, R, having the form of a short cylinder, to the exterior of which the lower end of the wick is secured, so that the wick may be moved up and down in the wick tube by moving the thimble wick holder, by means of a rack and pinion of the usual construction for such purpose, or by other suitable mechanism. The employment of such a wick holder permits the wick to be gradually exhausted by burning and trimming down to the fag end, which is secured to the thimble, without requiring the wick to be shifted upon the wick holder. The perforated air screen for the exterior current of air is, by preference, made of two cylinders E, F, of the material known as 'perforated metal,' although one cylinder only may be used, if deemed expedient. The perforations of this material ('perforated metal') are so small that the air is compelled to pass through them slowly in minute streams, which mingle in the space *b*, within the air screen, so that sudden variations in the pressure of the exterior air do not materially affect the flow within the air screen, and consequently do not cause the flame to flicker materially. This perforated air screen is so combined with the circular hollow wick tube C, and the cap deflector hereinafter described, that the current of air which passes to the exterior of the flame through the cap deflector, is compelled to pass through the perforations of the perforated air screen. The inner cylinder F is sustained by the circular hollow wick tube C. The outer cylinder E is separated from the inner by a space *a*, but it is sustained by the inner cylinder F. The cap deflector G is situated at the upper end of the wick tube C, being supported by the inner perforated cylinder F. It is composed of two parts—the lower, *c*, cylindrical, and the upper, *d*, conical, terminating at the orifice from which the flame issues. This cap deflector, as represented in the drawing, extends above the wick C, when the latter is at the highest position it occupies while the lamp is burning, and its interior forms a combustion chamber above the wick, in which the flame is permitted to form before it makes its exit from the orifice of the cap deflector. In these two respects the cap deflector differs

from the old cones used to deflect the exterior current of air, in the old camphene or spirit lamps, in which the cone was placed so low that its upper orifice was on a level, or thereabouts, with the upper edge of the wick when in its highest position for burning, so that there was no combustion chamber above the wick, in which the flame could form after leaving the wick. It also differs from the said cones in the respect that it directs the strongest current of air upon the flame at a considerable distance above the wick, in such manner that the flame is contracted upon, and brought into intimate contact with, the current of air passing up its interior from the hollow wick tube, so that an intense combustion of the carbonaceous matter of the flame is effected after the particles have had time to attain a glowing heat, during their passage through the combustion chamber. The wick tube is connected by a tubular passage, B, with a lateral reservoir, A, for the oil, so that the latter is supplied to the wick by gravitation, without the necessity of employing mechanism to force it up the wick. The lateral reservoir is a matter of great importance in a lamp for a locomotive head-light, because such a reservoir may be placed behind the reflector of the head-light, and still supply the wick freely by gravitation, whereas it would be impracticable to surround the wick tube within the reflector with the reservoir, on account of the space occupied by it. The perforated air screen, L, for the interior current of air, is combined with the wick tube C in such manner that the air that enters the interior passage, S, of the hollow wick tube is compelled to pass through it. This air screen, like the exterior air screen, is formed, by preference, of 'perforated metal,' the holes of which are sufficiently fine to compel the air to enter with a low velocity, and thus prevent material variation in the pressure of the air in the head-light, from the flickering of the flame. In the present example, the air screen for the interior current is secured to the drip cup K, which catches the overflow from the wick tube. This drip cup has an opening at its bottom through which its contents can be withdrawn by removing the screw plug M, which closes the opening. The portion of the drip cup that is within the air screen L is perforated with a number of

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large openings, *h*, *h*, so as to permit the air which enters the air screen to pass freely to the wick tube. In order that the flame of the lamp may be prevented from rising from the orifice of the cap deflector in a cylindrical column of great height compared with its diameter, a button, *g*, is combined with the other members of the lamp, in such manner as to compel the flame to spread as it rises from the cap deflector. This button is supported upon a stem, *f*, which is sustained in the centre of the wick tube, *C*, by perforated diaphragms, *H*, *I*, which retain it securely in its position, but do not prevent the interior current of air from supplying the interior of the flame in the requisite quantity to secure perfect combustion. The perforated diaphragms, although not essential, are more useful than simple arms would be, because they not only sustain the stem of the button, but also act supplementally to the perforated air screen *L*, for the interior current of air, and render the flow of that current still more equable. The equability of the flow of this interior current is increased by the use of a third perforated diaphragm, *J*, placed at the lower end of the wick tube. The lamp thus described is used in connection with a glass chimney which rests upon a gallery, *t*, and produces the requisite draught of air through the air screens. The gallery being close, or without openings, prevents currents of air from passing from the exterior of the lamp under the chimney, and over the deflector, to the flame. This feature of the lamp is of great importance in a locomotive head-light, because, when the locomotive is in motion, the head-light is filled with strong currents of air, and, if such currents are permitted to have direct access to the flame above the deflector, they cause it to streak and flicker, and to deposit soot upon the chimney, thereby obstructing the passage of light. When the lamp is in operation, the vapors rising from the wick inflame gradually ; and, as the carbonaceous constituents at the lower part of the flame are not sufficiently heated to give out much light, the flame at the wick is mostly blue in color, as seen at figure 1. As, however, the flame extends upward within the combustion chamber formed by the cap deflector, the carbonaceous constituents attain a higher temperature, and, when they reach the

orifice of the cap deflector, are at a glowing heat. At the orifice a rapid contraction takes place, the external current of air is driven against the column of flame above the wick at a sharp angle, and the flame itself is forced into the inner current, so that the products of the decomposition of the oil are brought into immediate contact with the air while at a glowing heat. The result is, that intense combustion is produced, the greatest quantity of light is generated from the quantity of oil which the wick is capable of supplying, and, consequently, a most intense light is produced from a wick occupying a comparatively small space within the head-light. The cap deflector thus used by me as a member of some of my combinations must not be confounded with the deflecting chimneys heretofore used with lamps. It constitutes no part of the chimney, but is a distinct instrument, and its construction, as such, permits it to be formed of metal, and to be used with a succession of chimneys, which being of glass, are frequently broken and require to be replaced. It is an essential feature of my invention, that the perforated air screens of my lamp have free access to the air within the head-light, so that the air may be supplied to them in the requisite quantity to insure combustion of the oil which the wick is capable of supplying; because, the small perforations compel the air to pass through the screen at a low velocity, and, therefore, a large perforated surface must have access to the air, in order that the requisite quantity may pass through, and, if either air screen were so covered as to prevent the free access of air to it, the supply of air would be choked and the efficiency of the lamp would be destroyed. Having thus described a lamp embodying my improvements, I wish it to be understood that I do not claim to be the original inventor of any one of the individual instrumentalities or members of which my lamp is composed, as I am aware that such instrumentalities have been used before my invention, but, as such use was in combinations substantially different from those devised by me, I claim as my invention and desire to secure by letters patent: 1st. The combination, in a lamp, of the following members, viz.: the circular hollow wick tube, perforated air screen for the

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exterior current of air, and cap deflector, substantially as set forth. 2d. The combination, in a lamp, of the following members, viz.: the circular hollow wick tube, perforated air screen for the exterior current of air, cap deflector, and lateral oil reservoir, substantially as set forth. 3d. The combination, in a lamp, of the following members, viz.: the circular hollow wick tube, perforated air screen for the exterior current of air, cap deflector and button, substantially as set forth. 4th. The combination, in a lamp, of the following members, viz.: the circular hollow wick tube, perforated air screen for the exterior current of air, cap deflector, and thimble wick holder, substantially as described. 5th. The combination, in a lamp, of the following members, viz.: the circular hollow wick tube, lateral oil reservoir, and perforated air screen for the current of air in the interior of the wick tube, substantially as set forth. 6th. The combination, in a lamp, of the following members, viz.: the circular hollow wick tube, perforated air screen for the interior current of air, lateral oil reservoir, and cap deflectors, substantially as described. 7th. The combination, in a lamp, of the following members, viz.: the circular hollow wick tube, cap deflector, perforated air screen for the interior current of air, and button, substantially as set forth. 8th. The combination, in a lamp, of the following members, viz.: the circular hollow wick tube, cap deflector, lateral oil reservoir, perforated air screen for the interior current of air, and button, substantially as set forth. 9th. The combination, in a lamp, of the following members, viz.: the circular hollow wick tube, cap deflector, and perforated air screens for both the exterior and interior currents of air, substantially as set forth. 10th. The combination, in a lamp, of the following members, viz.: the circular hollow wick tube, cap deflector, perforated air screen for the exterior current of air, and close chimney gallery, substantially as set forth. 11th. The combination, in a lamp, of the following members, viz.: the circular hollow wick tube, thimble wick holder, cap deflector, button, perforated air screens for the exterior and interior currents of air, and lateral oil reservoir, substantially as set forth."

The defendant attacks the plaintiff's patent for want of

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novelty, and has put in evidence various patents which are claimed to anticipate the plaintiff's inventions. Those patents were granted as follows: English patent to Jeremiah Bynner, December 9th, 1837; English patent to William Young, December 4th, 1843; patent to Stephen J. Gold, July 16th, 1841; patent to William M. Kimball, February 26th, 1856; patent to John Carton, assignee of John Stuber, May 20th, 1856; patent to Jacob Stuber and Frederick Frank, April 23d, 1861; and patent to John G. Webb, October 14th, 1851. The specification of the plaintiff's reissue states distinctly that he does not claim to be the original inventor of any one of the individual members which compose the several combinations claimed by him. He claims that such several combinations were not before united in a lamp. The inquiry, therefore, is, whether such several combinations existed before, each, in its entirety, in any of the earlier patents adduced. An examination of those patents shows that this inquiry cannot be answered in the affirmative.

The Young patent is relied on as containing the three members combined in the plaintiff's first claim. But the cone deflector of Young is not the cap deflector of the plaintiff. The latter extends above the wick when the wick is at the highest point it occupies while the lamp is burning; whereas the former is, at most, only on about a level with the upper end of the wick when the lamp is burning, and, if the wick of Young should be raised, as it is practically in the lamps of locomotive head-lights, the upper orifice or end of the Young cone would be below the upper end of the wick. Moreover, the plaintiff's cap deflector forms a combustion chamber above the wick, in which the flame is permitted to form before it makes its exit from the orifice of the cap deflector; whereas, no combustion chamber is formed by Young's cone deflector. Again, the plaintiff's cap deflector has a peculiarity not possessed by Young's cone deflector, in that, as set forth in the plaintiff's specification, the former directs the strongest current of air upon the flame at a considerable distance above the wick, in such manner that the flame is contracted upon, and brought into intimate contact with, the current of air passing up its interior from the

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hollow wick tube, so that an intense combustion of the carbonaceous matter of the flame is effected after the particles have had time to attain a glowing heat during their passage through the combustion chamber. The evidence shows, that, by the use of the plaintiff's cap deflector, as compared with the use of Young's cone deflector, a wick of the same size will produce a flame materially greater in brilliancy and volume, all other conditions being the same. As the plaintiff's cap deflector is a member of all his claims but the fifth, the Young patent is no answer to such claims. As to the fifth claim, the lateral reservoir is a member of it, and there is no lateral reservoir in the Young patent. This disposes of the Young patent.

The Gold patent has no perforated air screen for the exterior current of air and no cap deflector. All of the plaintiff's claims but the fifth embrace one or both of those members. Nor has the Gold patent the combination found in the plaintiff's fifth claim.

The Carton patent has no perforated air screen for the exterior current of air. All of the plaintiff's claims except the fifth, sixth, seventh and eighth embrace this member. Nor is any one of the several combinations of the plaintiff in his fifth, sixth, seventh and eighth claims found in the Carton patent. The same remarks are true of the Bynner patent.

The other patents adduced by the defendant do not any of them contain any of the plaintiff's combinations.

It is contended for the defendant, that all of the claims of the plaintiff's patent except the eleventh are claims for aggregations and not for patentable combinations, and the doctrines of the cases of *Hailes v. Van Wormer*, 20 Wallace, 353, and *Reckendorfer v. Faber*, 2 Otto, 347, are adduced to show the invalidity of those claims. As all the individual members of each of the plaintiff's combinations are old, and each of such members is found in some pre-existing lamp, it is urged that each of such members had, in the prior lamp, the same office and the same operation which it has in the plaintiff's lamp, and that the plaintiff has only aggregated or assembled the detached parts or members, with change of position, and has not made any patentable combination. It is contended

that no new, improved or useful result is produced by any aggregation claimed by the plaintiff. For instance, as to the first claim of the plaintiff's patent—the combination, in a lamp, of the circular hollow wick tube, perforated air screen for the exterior current of air, and cap deflector—it is contended that these parts do not co-operate to effect any definite result ; that the aggregation of those three parts does not make a complete lamp ; that the circular hollow wick tube does not co-operate with said perforated air screen, or modify in any manner the action of said air screen ; that said air screen does not modify the action of said wick tube ; that said air screen would operate in the same manner with a flat wick tube and without any wick tube ; that the plaintiff's wick tube would operate in the same manner without said air screen ; and that the action of neither of those two members is modified by the cap deflector. It is also urged, that there is no relation between the cap deflector and the lateral oil reservoir ; and none between the cap deflector and the perforated air screen for the exterior current of air ; and none between said air screen and the button ; and none between the said air screen and the thimble wick holder ; and none between the lateral oil reservoir and the perforated air screen for the interior current of air ; and none between those two parts unitedly and the circular hollow wick tube.

The doctrine of *Hailes v. Van Wormer* is, that a new combination, if it produces new and useful results, is patentable, though all the constituents of the combination were well known and in common use before the combination was made ; that the results, however, must be a product of the combination, and not a mere aggregate of several results, each the complete product of one of the combined elements ; that, merely bringing old devices into juxtaposition and there allowing each to work out its own effect, without the production of something novel, is not invention ; and that no one, by bringing together several old devices, without producing a new and useful result, the joint product of the elements of the combination, and something more than an aggregate of old results, can acquire a right to prevent others from using the same devices, either singly or in other combinations.

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The same doctrine was affirmed and applied in *Reckendorfer v. Faber*. In *Hailes v. Van Wormer* the patent was for improvements in self-feeding stoves. It claimed combinations of devices all of which singly were old. It was held, that the use of revertible flues in the same stove with a flaring fire pot, and a supply reservoir with a contracted discharge end, and openings for illumination, was a mere aggregation of devices, and not invention; that no new operation was given to the revertible flues by their use in combination with the other devices, different from that which they had when not used in such combination; that the operation of such flues, in both cases, was to conduct the products of combustion into the exit flue; that such effect had no relation to the combination of such flues with the other devices, and could not be called the product of the combination; and that revertible flues had no more to do with a stove supplied by a feeder than with a stove supplied by hand. In *Reckendorfer v. Faber*, a lead pencil was old and the use of india rubber for erasure was old, and the patent claimed, as a combination, the application of a piece of india rubber to one end of the same piece of wood which made the lead pencil. The combination was held not to be patentable, because no new result was produced by the union of the two, and there was no joint operation of the two, each performing the same operation and in the same manner as if the other were not present, and there was no relation between the two in the performance of their several functions, and no reciprocal action.

These doctrines are not applicable to the present case. The flame of the lamp, and its illuminating character, as to brilliancy, steadiness, size and position, is the result to which all the devices used contribute. They all co-operate to effect and modify such illuminating character of the flame of the lamp. A locomotive head-light must be large, brilliant, steady, easy of adjustment as to the position of its wick, concentrated as nearly as possible in the focus of the reflector, and supplied freely with oil without interfering with the projection of the light forward, and without pumping mechanism. The circular hollow wick tube enables the light to be concentrated

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near the focus of the reflector. The perforated air screen for the exterior current of air promotes the steadiness of the flame. The cap deflector increases the volume and brilliancy of the flame. The lateral oil reservoir, supplying the oil by gravitation, enables the light to be projected forward without interference, and also enables a wick of a given size and a chimney of a given height to ensure the consumption of the maximum quantity of oil and the production of the maximum quantity of flame. The button gives such shape to the flame that it is concentrated more nearly in the focus of the reflector. The thimble wick holder enables the flame to be readily adjusted by raising or lowering the wick. The perforated air screen for the interior current of air contributes to the steadiness of the flame, and so does the close chimney gallery.

Three forms of head-lights are produced as having been used by the defendant on its locomotives, known in the case as No. 3, No. 4, and No. 5.

No. 3 infringes the first, second, third, fourth and tenth claims of the plaintiff's patent. It has substantially the plaintiff's circular hollow wick tube, exterior air screen, cap deflector, lateral reservoir, button, thimble wick holder and close chimney gallery. It makes no difference, that, in No. 3, the perforations for the exterior current of air are narrow horizontal slits. Their operation compels the air to pass through them slowly, in thin streams which mingle inside so that the flow of air inside is not materially affected by variations in the pressure of the air outside. The cap deflector in No. 3 extends above the wick when the latter is in the highest position it occupies while burning, and its interior forms a combustion chamber above the wick, in which the flame is permitted to form before it issues from the orifice of the deflector.

No. 4 infringes the fifth, sixth, seventh and eight claims of the plaintiff's patent. It has substantially the plaintiff's circular hollow wick tube, lateral reservoir, cap deflector, button and interior air screen. The cap deflector in No. 4 has the peculiarity pointed out as the peculiarity in the cap deflector of No. 3. The perforated air screen for the interior current

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of air, in No. 4, is so arranged that the air which enters the interior passage of the hollow wick tube must pass through such air screen, and its perforations operate substantially as in the plaintiff's lamp, to compel the air to enter with a low velocity.

No. 5 infringes all the eleven claims of the plaintiff's patent, and contains each one of the eight members which enter into those claims. The perforated air screen for the exterior current of air in No. 5 is so arranged that the air passes through its perforations in minute streams which mingle inside, and the current of air which passes to the exterior of the flame through the cap deflector must pass through the perforations in such air screen. The cap deflector in No. 5 has the peculiarity pointed out as the peculiarity in the cap deflector of No. 3. The perforated air screen for the interior current of air in No. 5 has the peculiarity pointed out as the peculiarity of the perforated air screen for the interior current of air in No. 4. The close chimney gallery in No. 5 is situated at the base of the cap deflector and at the head of the perforated air screen for the exterior current of air. This close gallery has no openings, and, therefore, prevents currents of air from passing from the exterior of the lamp under the chimney and over the deflector to the flame.

In No. 3 the screen for the exterior current of air is not composed of two parts, one surrounding the other, and each perforated, with a space between the two, the air passing in succession through the perforations of both. In respect to this, the plaintiff's specification says, that such screen is, by preference, made of two cylinders, of the material known as "perforated metal," but that "one cylinder only may be used, if deemed expedient." So, too, in No. 3 the perforations in the exterior screen are horizontal slits and not circular holes. But it is entirely clear that a single perforated cylinder may be a substantial mechanical equivalent for two perforated cylinders, to regulate the flow of the air to the exterior of the flame, and that the shape of the perforations is immaterial. The essential point is, that the screen should be perforated with openings relatively so small as to compel the air to pass slowly through them in small streams, which min-

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gle in the space inside of the ultimate perforations, in such manner that sudden variations in the pressure of the external air do not materially affect the flow of the air inside of the ultimate perforations.

In No. 3 there is a ring of small orifices through the body of the cap deflector, which orifices permit currents of air to pass through the deflector from the interior of it to the space between the deflector and the glass chimney, and to operate to cool the chimney. But these orifices do not admit air from the outside to pass under the chimney and over the deflector to the flame. Notwithstanding such orifices, the chimney gallery in No. 3 is the close chimney gallery of the plaintiff. Such orifices may be an addition or improvement, but the plaintiff's lamp burns successfully without them. These remarks apply to No. 4 and No. 5, also. In No. 4 the air current to the interior is only once obstructed by a perforated screen, which is at the bottom, and is not obstructed by perforated diaphragms in the interior of the wick tube. But this makes no material difference. The plaintiff states, in his specification, that the perforated diaphragms are "not essential."

There can be no doubt that the combinations made by the plaintiff were the results of invention, and were patentable. The evidence shows that they were the results of careful and patient investigation and experiment. His lamp was the first one which successfully burned kerosene oil in a locomotive head-light. He was successful in becoming able to employ the great brilliancy of an oil rich in carbon, under the peculiar and disadvantageous circumstances of burning it in a lamp in rapid motion and subject to great vibrations. The merit of his lamp is generally acknowledged. It has superseded those previously in use, and it is used on nearly all the railroads in the United States. No prior invention is adduced as anticipating him, except such as are found in pre-existing patents. They were considered by the Patent Office on the granting of the reissue, and held to be of no effect, and the critical examination to which they have now been subjected confirms that conclusion.

The plaintiff is entitled to a decree for an injunction and an

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account of profits and an ascertainment of damages, in accordance with the prayer of the bill.

Edmund Wetmore, for the complainant.

West & Bond, for the defendant.

ASA JOHNSON ET AL.

vs.

THE FLUSHING AND NORTH SIDE RAILROAD COMPANY.
IN EQUITY.*

The second claim of the reissued letters patent granted to Asa Johnson and Thomas S. Sandford, April 16th, 1872, for "an improvement in fastening sheet metal to roofs," namely, "In combination with the adjusting bolt and slotted side plates, suitably connected to, and combined with, the materials to be fastened together, for the purpose of accommodating the expansion and contraction of such materials with reference to each other, substantially as specified," is invalid, because the essential elements of the combination claimed are different from the essential elements described in the original patent, and the result produced by the combination described in the reissue is different from that produced by the combination described in the original patent.

The cases of *Gill v. Wells* (22 Wall., 1) and *Herring v. Nelson* (14 Blatchf. C. C. R., 293), commented on.

(Before BENEDICT, J., Eastern District of New York, August, 1878.)

BENEDICT, J.

This action is brought to restrain the Flushing and North Side Railroad Company from using a certain fastening for their railroad rails, commonly known as the "fish-plate joint," upon the ground that the plaintiffs have the exclusive right to the use of such fastening, by virtue of a patent for an "improvement in fastening sheet metal to roofs," reissued to Asa Johnson and Thomas S. Sandford April 16th, 1872,

* 15 Blatchf. C. C. R., 192.

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and marked reissue No. 4,870. The fastening complained of consists of two plates fastened one on each side of the two rails to be connected together, and bolted by means of bolts passing through the rails and through slots in the plates. The two rails are thus securely fastened together, all change of their relative position, except in the single direction of the slots in which the bolts can slide, being prevented, while, thus, the expansion and contraction of the rails in that direction is accommodated.

In order to a proper understanding of the question to be discussed, it is necessary to call attention to the language of the reissued patent, upon which the plaintiffs' rights depend. In the title of the patent, the invention is designated as "an improvement in fastening sheet metal to roofs." In the specification, the invention is called, sometimes, "an adjustable fastening," and, sometimes, "an adjustable fastener." The only description of the invention given is in connection with its use in fastening metallic roofs to buildings, but it is stated that the fastener may be used wherever it is necessary to allow for the contraction or expansion of materials to be fastened together. The specification states, that the "principle of my invention consists in connecting the metal to be fastened with a bolt or pin arranged to slide in slotted bearings in the direction of expansion or contraction, said adjustable bolt and its bearings being combined with materials to be fastened." In connection with the description, drawings are referred to, in which, as the specification says, are indicated the screws for attaching the metallic roof to the stud—the stud—the adjusting bolt or pin, to which the metallic roof is connected by the stud and screw, said bolt passing through the stud and through the slots of the side plates or flanges—the side plates or flanges, provided with slots, which form the bearings of the adjusting bolts—the bottom plate, used as a convenient means of attaching the side plates to the wooden sheathing of the building—an india rubber cord, which may be used in applying the adjustable fastener to buildings—the screws for attaching the bottom plate, and, with it, the side plates, to the sheathing—the sheathing, greatly enlarged in thickness in proportion, to illustrate the

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details of the connection of the adjustable fastener to buildings—the metallic roofing. The specification, after explaining the method of using the invention, in attaching metallic roofing to buildings, goes to say : " Both the wooden sheathing and the metallic roof are thus connected to the self-adjusting mechanism, consisting of the slotted side plates and the bolt which slides in them." Two claims are set forth in this patent, the second of which is the only one requiring attention, and is as follows : " 2. I claim, in combination with the adjusting-bolt and slotted side plates, suitably connected to, and combined with, the materials to be fastened together, for the purpose of accommodating the expansion and contraction of such materials, with reference to each other, substantially as specified." The word *with*, in the first sentence of this claim, is, by the plaintiffs, treated as a clerical mistake, and the claim read as if that word were absent. It is so treated here.

Some difference of opinion has been expressed as to what is the proper construction to be put upon this patent. According to the plaintiffs, it is to be understood as covering a combination of old devices adapted for use in connecting materials to be fastened together, in all cases where it is necessary to allow contraction or expansion of the materials, the elements of which combination are two pieces of material to be fastened together—two slotted side plates to furnish bearings for the adjustable bolt, and also to serve as clamps on opposite sides of the materials to be fastened together—an adjusting bolt to hold said clamping plates in position thereon. This construction of the reissue is necessary for the plaintiffs' case, as, otherwise, the case would fail upon the question of infringement, and, if such construction be the true one, the question of infringement is disposed of, it being conceded that the use of the fish plate joint would be an infringement of the plaintiffs' patent, so construed. Under such circumstances, it may properly be assumed, for the purposes of this decision, that the plaintiffs' understanding of the patent is correct.

The inquiry then turns to the question of the validity of the reissue. Its validity is denied by the defendants, upon the

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ground, that, if construed according to the plaintiffs' understanding, and, as it must be, in order to bring the defendants within its scope, it is for an invention different from any described in the original patent, and is, therefore, void. The proper construction of the original patent becomes, therefore, a decisive question in this case. That patent is for a combination. The word combination is, indeed, not to be found in the instrument, but the specification is devoted to a description of the inventor's mode of combining certain simple and well-known devices, in order to produce a specified result. Certain simple devices appear in the description, but as elements of a combination, and the language nowhere conveys the idea that the inventor has discovered anything but a method of using old devices, combined in a certain way, to produce a certain result. Whether the claim, as constructed, is for a combination or not, is immaterial here ; as that claim, although forming the first claim of the reissue, is not relied upon by the plaintiffs. What is described is alone material, and that is nothing unless it be a combination. The elements of the combination which, in the original patent, is set forth as having been first invented by the patentee, are plainly designated in the description given, and are, the stud—the flanges—the bottom plate—the adjusting bolt, “ passing through the stud,” and capable of moving in the slots of the flanges.

It has been earnestly contended, in behalf of the plaintiffs, that the specification does not declare either the stud or the bottom plate to be elements of the combination, and mentions them simply as means of applying the invention in the particular case taken as an illustration. But, the language of the description is plain. The stud is described as not only connecting but adjustable. It is designated “ the adjustable connecting stud.” It is spoken of as distinct from the metal to be connected, and it will, as it is said, “ accommodate itself to any direction required by the metal.” In the drawings which are furnished to represent the fastener, the stud appears, and without any intimation that it is not an essential part of the invention ; nor is there, throughout the whole patent, any language capable of suggesting that the

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stud is not as essential a part of the invention as any other portion described.

Equally specific is the original patent in declaring the bottom plate to be an element of the combination. The bottom plate appears in all the drawings, and nowhere is there an intimation that it is not an essential feature of the invention. The constant and necessary presence of the bottom plate as an element of the combination is also implied in the designation given to the bearings of the bolt, which, in the original patent, are always designated as flanges and never as side plates.

In this connection, it will be useful to notice, that, in the reissued patent, a change of phraseology has been adopted in speaking of the stud as well as of the bottom plate; and explicit language, not found in the original, is inserted for the plain purpose of eliminating the stud and the bottom plate from the combination. Thus, where, in the original, the language is, "Fig. 3 is an end elevation of the self-adjusting fastener," in the reissue the language is, "Fig. 3 is an elevation, in section, of my adjustable fastenings and the device for connecting the same to the metal roof, detached." Where, in the original, the language is, "Fig. 5 is a plan view of the bottom plate," in the reissue the language is, "Fig. 5 is a plan view of the bottom plate, to which the bearings of the adjusting bolt are attached, in this instance." What in the original are in all cases termed flanges, in the reissue are sometimes termed side plates, and sometimes "flanges or side plates." The original says: "I may find, in using my adjustable fastener, it necessary to make some of them—those that are in the parallel lines with the flanges—to fit up close to the sides of the stud." In the reissue the statement is: "Where, however, the movement is only sensible in the direction of the slots, the side plates are made to fit up close." These changes and additions made in the reissue, as understood by the plaintiffs, are not mere corrections whose effect is to render accurate and specific what was before uncertain, but they work an essential alteration of the specification, and effect the elimination from the combination of two elements—the stud and the bottom plate—which before that were described

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as essential elements of the combination secured. The character of these changes tends to confirm the conclusion, that the original patent is correctly interpreted when it is held to include the stud and the bottom plate as essential elements of the invention secured. The invention intended to be described and secured by the original patent, is a combined device, constructed in two members, so connected together, by means of the bolt and its slotted bearings, as to permit a change to a limited extent in the relative position of the two members with reference to each other. This device is to be inserted between the two materials to be fastened together, a connection of those materials being formed by fastening the adjusting stud to one, and the flanged bottom plate to the other. In the reissue, as it must be understood in order to sustain the charge of infringement, the stud forms no part of the fastener, but has become a part of the materials to be fastened, and the side plates not only furnish bearings for the bolt, but perform the additional important and essential function of furnishing a strong lateral support to the materials, by clamping the same between them. In the original, the language, plainly importing, as it does, that the stud is an essential part of the fastener and not a part of the materials to be fastened, excludes the idea that the flanges are in any case to furnish lateral support to the materials to be fastened or to clamp the same. It is thus seen, that the essential elements of the combination described and sought to be secured by the reissue are different from the essential elements of the combination described in the original, and that the result produced by the combination described in the reissue is different from that produced by the combination described in the original patent.

By these changes, a substantial change in the subject-matter has been accomplished, and, upon established principles, the conclusion must follow, that the reissue is void. It is unnecessary, therefore, for me to go further; but it is proper, before dismissing the bill, to notice two adjudged cases cited by the opposing counsel as conclusive authority in favor of their respective views.

On the part of the defendants, the case of *Gill v. Wells*, 22 VOL. III—28

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Wall., 24, has been cited as being on all-fours with his case, and an authority adverse to the position of the plaintiffs. If I am correct in my understanding of the patents under consideration, the case in hand is not precisely like the case of *Gill v. Wells*, because, there, not only was there an omission of one well described ingredient of the patented combination, but there were substituted in its place several other devices, not equivalents for the omitted element. Here, no new device has been substituted in place of the stud, but, by removing the stud from the combination, and describing it as part of the material to be fastened, a new function has been given to the flanges, viz.: that of clamping between them the material to be fastened. Nevertheless, the reasoning of the court in *Gill v. Wells* affords support to the conclusion which I have reached in this case.

On the part of the plaintiffs, the case of *Herring v. Nelson*, 14 Blatchf., C. C. R., 293, has been cited as being in opposition to the case of *Gill v. Wells*, and an authority in support of the plaintiffs' case, binding upon this court. A reference to this opinion in *Herring v. Nelson*—one of the latest of the opinions of Judge Johnson, whose recent death is so greatly deplored—is sufficient to show that it was not understood to be in conflict with the decision in *Gill v. Wells*. Nor do I understand it to be in conflict with my conclusion in this case. The case of *Herring v. Nelson* was one where there was described in the original patent two results capable of being conceived of as independent of each other, and shown to contribute to a common result. These two results the original patent showed to be capable of being attained by separate and independent elements, combined in a manner described. The common result of the complete combination of all the elements described, was the cooling without waste of meal, in the process of converting grain to flour. But, as the opinion is careful to state, the specification and drawings could not fail to disclose to any intelligent examiner, that, while the combined action of all the parts described produced the complete result of cooling and saving the waste, there was described a sub-combination, producing a separate and independent result—viz., the cooling only. It was, therefore,

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held, that the inventor, having omitted in the original patent to claim the sub-combination thus described, might do so by a new claim in a reissue.

The present is no such case. Here, it is impossible to gather, from the original patent, a hint that the slotted flanges and sliding bolt, without the stud and bottom plate, will produce an independent result, capable of being separated from the complete result sought to be attained by the use of the complete combination, nor is there any language capable of suggesting that the invention secured will not only connect the materials together, but also prevent their lateral movements by securely clamping them between its flanges.

The views I have thus expressed are fatal to the plaintiffs' claim, and render it unnecessary to consider the other questions discussed by counsel. There remains, therefore, but to direct that the bill be dismissed, with costs.

Frederick H. Betts, for the complainants.

Hinsdale & Sprague, for the defendants.

CHARLES G. EVERET

vs.

JONATHAN THATCHER ET AL. IN EQUITY.

It is competent for the court to inspect a model exhibited in evidence, and, from such inspection, to decide as to the patentability of the alleged invention.

A decree of a circuit court taken *pro confesso* will not preclude full inquiry and investigation by another court.

(Before BAXTER and WELKER, JJ., Northern District of Ohio, September, 1878.)

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BAXTER, J.

When this case was before us in March last, we inspected the model of the invention, and intimated an opinion adverse to complainant. But his counsel are now insisting that we ought not to base our judgment in this case upon a personal inspection of the model, because, they say, it is not one of the things of which the court can take judicial notice. The proposition is certainly correct. We cannot take judicial notice of the model, nor have we assumed to do so. The patent is *prima facie* evidence of its own validity, and, if nothing more appeared in the case, we would declare it valid and protect it against infringement. But it is only *primâ facie* good, and not conclusive. The responsibility of adjudicating it valid or invalid is with the court, and we must do this upon legitimate evidence legally adduced in the case. The model is competent evidence, and has been exhibited as such by the complainant.

If the court is not authorized to inspect and pass judgment upon it, why is it introduced? It is a prevalent, if not universal, practice for the courts, in litigation of this character, to examine such models. And why may they not do so? Witnesses may be called to examine models of inventions as experts, and give their opinions of their merits. And may not judges, upon whom the law imposes the duty and responsibility of deciding the question, exercise their natural senses in the same way and to the same extent? It seems to us that judges, sitting in judgment upon the law and the facts, and called upon to decide whether a piece of coin, offered in evidence and produced to the court, is genuine or spurious, are at liberty to examine the coin for themselves, and apply such tests as are ordinarily applied, and exercise their own judgment in the determination of the question, and in doing so they would not be exceeding their judicial functions, because the coin thus exhibited is made evidence before them. And if it were made a question of fact whether a yard-measure produced before a court was greater or less than the legal length, the court would have the right to decide the disputed fact by an actual measurement. And if it is competent for a court to inspect a piece of coin or measure a yard-stick offered

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in evidence, may we not with equal propriety, and under the same rules of evidence, examine the model exhibited in evidence by the parties to this suit? The decisions of the Supreme Court afford numerous instances of criticisms of models exhibited before that court. The model offered in this case is not so complex as to be beyond the comprehension of the court. It is simply a piece of weather-boarding grooved on one edge and bevelled on the other. The invention is not such a new and useful improvement in that branch of mechanism as, in our judgment, makes it patentable. It, therefore, belongs to the public, and we think the complainant has not acquired such an exclusive right as entitles him to the protection of this court.

There is, however, other testimony on file showing the state of the art at the time, which supports the view we have taken. But, as we are entirely satisfied from the personal inspection we have made, that the pretended invention is not patentable, we are content to rest our judgment on this evidence alone, and do not, therefore, desire to hear the evidence read. But, in order to preserve the rights of defendants, we will consider it as having been read and as a part of the files of the case.

It has been urged that the patent involved has been adjudged valid by the Circuit Court of the United States for the Western District of Pennsylvania, and this adjudication is relied on as authority here. The judgment of that court, if based upon a *bona fide* contest, and after careful consideration, would be entitled to great respect. But, as we are advised, that judgment was rendered on a *pro confesso*, without answer or hearing, and upon the complainant's statement of his case. Such decrees are rendered upon mere motion, without investigation, and are not such adjudications as to preclude full inquiry by us.

A decree will be entered dismissing complainant's bill, with costs.

Wm. Lawrence, and Willev, Sherman & Hoyt, for the complainant.

Brewer & Kaiser, for the defendants.

PATRICK KELLEHER ET AL.

vs.

JOSEPH O. DARLING. IN EQUITY.

The reason of the rule, that, where a patent or publication is introduced in evidence to show that the complainant's invention had been patented or described in some printed publication prior to the supposed invention or discovery by the complainant, the defendant will not be permitted to prove that the invention described in the alleged prior patent or printed publication was made prior to such patent or printed publication, explained.

The rule, that, where the complainant offers in evidence the patent in suit, accompanied by the application, the presumption is that the invention was made at the time the application was filed, but that the complainant may, if he can, introduce evidence to show it was made and reduced to practice at a much earlier date, discussed.

Where the alteration in a reissue consists in the addition of a distinct invention, there ought to be found in the original specification enough to fairly apprise other inventors and the public that the original invention included and embodied such additional feature.

The invention described in the original patent, being in legal contemplation a new and useful manufacture, a reissue cannot include a claim for the process of manufacture, where in the original there was not a sufficient description of such process.

The rule, that, where the thing patented is an entirety, consisting of a machine or product, the respondent cannot escape the charge of infringement by alleging or proving that a part of the thing patented is found in one prior patent or machine, and another part in another prior patent or machine, and from the two or any greater number of such exhibits draw the conclusion that the patentee is not the original or first inventor of the improvement in question, considered.

Where more than one patent is included in one suit, and more than one invention secured in the same patent, the several defences authorized by the patent act may be pleaded to each patent in suit, and to each invention included in the charge of infringement, but a defence addressed solely to one patent has no application to the other patents.

The principle of law, that inventors may, if they can, keep their inventions

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secret, and, if they do, for any length of time, they do not forfeit their right to apply for a patent unless another in the mean time has made the invention and secured by patent the exclusive right to make, use, and vend the patented product, explained.

The question, whether it is sufficient, in order to defeat the right of the applicant to a patent, to show that his inventions had been in public use or on sale more than two years prior to his application, without proving that it was with his consent and allowance, considered.

The manner of pleading and proving special defences in suits for infringement, discussed.

The nature of the special defences to patent suits, considered.

The fourth claim of reissued patent No. 6,098, granted to P. Kelleher and J. C. Randlett, dated October 27th, 1874, for moccasin boot-packs, held void, as claiming new matter.

The first, second, and third claims of said patent held valid, and infringed by the defendants.

The reissued patent No. 6,099, granted to P. Kelleher and J. C. Randlett, dated October 27th, 1874, for moccasin shoe-packs, held valid, and infringed by the defendants.

(Before CLIFFORD, J., District of Maine, September, 1878.)

CLIFFORD, J.

Persons sued as infringers in an action at law may plead the general issue, and having given the required notice in writing thirty days before, may prove on trial the special matters set forth in the act of Congress, of which the following are material to be noticed in the present case :

1. That the invention had been patented or described in some printed publication prior to the supposed invention or discovery.

2. That the patentee was not the original and first inventor or discoverer of any material or substantial part of the thing patented.

3. That the invention had been in public use or on sale in this country for more than two years before his application for a patent, or that it had been abandoned to the public. (Rev. Stat., § 4,920.)

Notices of the kind must be in writing, and must be given thirty days before the trial, and if the defence is prior invention, knowledge, or use of the thing patented, the requirement is, that it shall state the names of the patentees

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and the dates of their patents, and when granted, and the names and residences of the persons alleged to have invented, or to have had the prior knowledge of the thing patented, and where and by whom it had been used. Like defences may be pleaded in equity for relief against infringement, and proofs of the same may be given upon like notice in the answer. Proof to sustain the first defence is sufficient if the patent introduced for the purpose, whether foreign or domestic, was duly issued, or the complete description of the invention was published in some printed publication prior to the supposed invention or discovery, and the patent or printed publication will be held to be prior if it is of prior date to the patent in suit, unless the patent in suit is accompanied by the application for the same, or unless the plaintiff or complainant, as the case may be, introduces parol proof to show that the invention was actually made prior to the date of the patent, or prior to the time the application was filed. Neither the defendant or respondent can be permitted to prove that the invention described in the alleged prior patent, or the invention described in the printed publication, was made prior to the date of such patent or printed publication, for the reason that the patent or publication can only have the effect as evidence that is given to them by the act of Congress. Unlike that, the presumption in respect to the invention described in the patent in suit is, if it is accompanied by the application, that it was made at the time the application was filed, and the plaintiff or complainant may, if he can, introduce evidence to show that it was made and reduced to practice at a much earlier date.

Two reissued patents are the subject of the present suit, both of which are of the same date, and were obtained upon the surrender of an original patent previously issued to the same patentees for certain alleged new and useful improvements in the manufacture of moccasin boots and shoes, or boot and shoe packs, as particularly described in the original specification. Power of the commissioner to cause a new patent for the same invention to issue in case the original is surrendered is not questioned, nor is it denied that he, in his discretion, may cause several patents to be issued for distinct

and separate parts of the thing patented, upon demand of the applicant, and upon payment of the required fee for each reissue. (Rev. Stat., § 4,916.) Separate examination will be given to each patent, though certain parts of the specification in each are the same, having been borrowed from the original. As described in the original and in each of the reissues, the invention consists in so cutting the leather or material of which the packs are manufactured as to be able to do all the sewing of the upper parts by machinery instead of by hand, the latter being the method necessarily employed at present, and it also enables the operator to improve the shape, and to so change the position of some of the seams as to add very much to the durability of the packs. Detailed description is then given in the specification of the reissued patent for the moccasin-boots or boot-pack of the several pieces of which the pack is composed, by special reference to certain figures in the reissued drawings, and in the exact words and figures contained in the original drawings. Appended to that is the description of the manner in which the leg of the boot-pack and the quarter and vamp are cut, the same being given in the same words as in the surrendered patent, from which it appears that the leg of the boot-pack is made in two pieces, that the quarter is formed in one piece crossing and passing forward of the seam in the leg and joining directly on to the vamp, and that the vamp is also stitched to the front part of the leg, all the seams being flat seams, which may be closed by sewing-machines. Every step in the process of cutting and stitching the parts together having been described, the patentee proceeds to state that the different parts are designed and arranged expressly with a view to enable all the seams to be closed by machinery, and to dispense with hand-work altogether in the sewing, even to sewing on the soles, and that for that purpose all the patterns have been simplified so as to admit of lap-seams: and he expresses the belief that there never was a pack made before in which lap-seams were exclusively used, nor in which all the seams, even to sewing on the soles, could be accomplished by machinery, which as he states reduces the cost of manufacture very materially, and allows the use of heavy material for soles, and lighter

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and less expensive material for uppers. Both of the things patented are called packs from the manner in which they are used. They are made of a peculiar kind of leather called "moccasin" leather, and are cut large to admit of packing between the inside of the upper leather and the foot of the wearer. Boots and shoes are usually made to fit the foot, but the moccasin-pack, whether boot or shoe, is made much larger than the foot of the wearer, in order that it may contain the desired amount of packing for protection to the foot in extreme cold weather.

I. Coming first to the reissue 6,098, which is the moccasin-boot, and which contains four claims to the effect following :
1. For a moccasin boot or shoe pack formed of five parts, cut as shown and described, and joined together by flat lapped seams. 2. For a moccasin boot or pack with the leg formed of two flat pieces cut as shown and described, and united by two lapped seams, one on each side of the leg, as shown and described. 3. For the quarter of a moccasin-pack cut in the form shown and described and formed into one piece, for the use as specified. 4. For the described process of smooth crimping the instep of a pack or moccasin, consisting in cutting the tip and front with edges of different lengths and of dissimilar outlines, and bending, stretching, and compacting the edges, in the act of sewing with a flat seam, so as to cause them to coincide under the needle, the joining of the differential edges displacing and forcing out the leather of the two parts in such a manner as to form the crimp. .

Service was made, and the respondent appeared and filed an answer in respect to the first patent, setting up in substance and effect the following defences : First. That the reissued patent, 6,098, embraces and includes, both in the specification and claims, new matter not described, suggested, or indicated in the specification of the original patent, nor shown in the drawings or Patent Office model. Second. That the invention described in the specification of the patent, and claimed in the second claim, was patented to the persons named in the answer prior to the supposed invention by the complainants. Third. That the patentees are not the original and first inventors of such part of the invention as is de-

scribed in the specification, and claimed in the second claim of the patent, or any material or substantial part of that which is therein described. Fourth. That so much of said invention as is so described and claimed in the second claim of the patent was in public use and on sale more than two years prior to the supposed invention by the complainants. Fifth. That the patentees were not the original and first inventors of any material or substantial part of the invention claimed in the fourth claim of the patent, but that the same was known to and in public use by the persons named in the answer prior to the supposed invention by the patentees. Sixth. That he has never infringed the first three claims of the patent.

1. Support to the first defence, which is that the feature of the invention claimed in the fourth claim was not described or indicated or suggested in the original specification, nor shown in the drawings or Patent Office model, is found both in the specification and fourth claim of the reissued patent under consideration. Extended argument to sustain that defence is quite unnecessary, as it is scarcely possible to imagine what could be added to the description of the process of producing the crimp in the moccasin-boot, to render it more specific and intelligible than it now is, as incorporated into the specification of the reissued patent, nor is any argument necessary to show that every word of the description is new matter, not found in the specification of the original patent, as that is apparent from a comparison of the two instruments. Corresponding addition is also made to the drawings, showing conclusively that the solicitor who applied for the new patent did not deem the drawings of the old patent sufficient to illustrate the new feature added to the invention in the descriptive portion of the reissued specification.

Suggestions of an ingenious character are made, in behalf of the complainants, to show that an expert, in attempting to unite the described parts of the patented product by the lap seam, might discover the means of bending, stretching, and compacting the edges of the parts in the act of sewing, so as to cause them to coincide under the needle, as stated in the amended specification, and that by the joining of the differential edges the leather of the two parts would be displaced

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and forced out in such a manner as to form the crimp shown in the new figure of the drawings ; but the patent law, in terms, requires more than that of the patentee before he is entitled to a patent. Before any inventor shall receive a patent for his invention he shall make application therefor in writing, and shall file in the Patent Office a written description of the same, and of the manner and process of making, constructing, compounding and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art or science to which it appertains to make, construct, compound and use the same. Rev. Stat., §4,888. Apply that rule to the original patent, and it is clear that if the fourth claim of the reissued patent had been inserted in the original patent it could not have been sustained for the want of a compliance with that important requirement of the patent act. Cases arise, undoubtedly, where a suggestion in the specification, or an indication in the drawings or Patent Office model of the original patent, may be sufficient to justify an alteration or enlargement of the description of the invention in the specification of a reissued patent, as where the change consists merely in the substitution of a different material from that of which a device is composed, or in the modification in the form of a device, or in the proportions of the ingredients ; but where the alteration consists of a distinct invention, there ought to be found in the original specification enough to fairly apprise other inventors and the public that the invention includes and embodies such additional feature. *Seymour v. Osborne*, 11 Wall., 544. Interpolations of new features, ingredients, or devices which were neither described, suggested, nor indicated in the original patent or Patent Office model, are not allowed in the reissued patent, as it is clear that the Commissioner has no jurisdiction to grant a reissue unless it be for the same invention as that included and embodied in the original patent, nor can any new matter be properly introduced into the specification, nor the Patent Office model or drawings in a machine patent be amended, except each by the other. Rev. Stat., § 4,916.

Beyond doubt the invention described in the original patent, though composed of the several parts therein described, is,

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in legal contemplation, a new and useful manufacture, and it is equally clear that the process of making an article of manufacture is a different invention from that of the product. Both may be included in the same patent, but the required description is as essential and indispensable in the one case as in the other. Viewed in the light of these suggestions, the court is of the opinion that the fourth claim of the reissued patent is void. Patents, in certain cases, may be good in part and void in part, the rule being that whenever a patentee, through inadvertence, accident, or mistake, and without any fraudulent or deceptive intention, has claimed more than that of which he was the original and first inventor or discoverer, his patent shall be valid for all that part which is truly and justly his own, provided the same is a material or substantial part of the thing patented. Rev. Stat., § 4,917; *Goodyear v. Rubber Co.*, 2 Cliff., 374.

2 and 3. Special consideration must also be given to the second and third defences set up in the answer, as the attempt of the respondent in those two defences is to show that the matter claimed in the second claim of the patent in suit was patented to others prior to the supposed invention by the complainants, and that the patentees are not the original and first inventors of any material or substantial part of what is claimed in that claim. Such defences, if well pleaded to the invention described in the patent, would be good defences, as the act of Congress provides that the defendant in a suit at law may plead the general issue, and, having complied with the requirement as to notice, may give such special matters in evidence, and the provision is that if any one or more of the special matters alleged shall be found for the defendant, judgment shall be rendered for him with costs. Like defences may be pleaded in equity under like conditions, the allegation in the answer denying infringement supplying the place of the general issue in an action at law. Under that pleading and notice the respondent in an equity suit may prove that the invention described in the patent in suit had been patented or described in some printed publication prior to the supposed invention by the patentee. Documentary evidence is required to sustain that defence, but, as

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before remarked, the evidence is sufficient if the patent introduced for the purpose, whether foreign or domestic, was duly issued prior to the alleged invention described in the complainants' patent, or if the complete description of the invention was previously published in some printed publication. Evidence of the kind must be held to be prior in point of time in all cases where the patent or printed publication precedes the date of the patent in suit, unless the patent in suit is accompanied by the application for the same, or unless the complainant introduces parol proof to show that his invention was made prior to the date of the patent or prior to the time the application was filed. Proof of the kind is not admissible on the part of the respondent to show that the invention described in the supposed prior patent or printed publication was made prior to their respective dates, for the reason already stated. Under the second and third defences, as pleaded, the rule is that the patent in suit affords the complainants a *prima facie* presumption that the patentees are the original and first inventors of that which is therein described as their improvement. Competent proof is requisite to overcome that presumption, as, for example, that the thing patented had been previously patented to another, or that it had been previously described in some printed publication, or that the patentees are not the original and first inventors of the patented improvement, or of any material or substantial part of the same. Where the thing patented is an entirety, consisting of a machine or product, the respondent cannot escape the charge of infringement by alleging or proving that a part of the thing patented is found in one prior patent or machine and another part in another prior patent or machine, and from the two, or any greater number of such exhibits, draw the conclusion that the patentee is not the original and first inventor of the improvement in question. Instead of that, his plea, which in the action at law is the general issue, is addressed to the entire charge of infringement, which casts the burden to prove that charge upon the plaintiff or upon the complainant in the suit in equity. Infringement is the charge made by the party seeking redress, and it is competent beyond all doubt for the defending party to show

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that he does not infringe at all, or that his machine, product, or manufacture infringes only a part of the claims of the patent in suit. Authority for that proposition is found in the very nature of the issue between the parties, but the only authority for attacking the originality and validity of the patent is that given by the patent act. Defences for that purpose must be addressed to the thing patented, and not merely to one of the separate features which it comprises. More than one patent may be included in one suit, and more than one invention may be secured in the same patent, in which cases the several defences authorized by the patent act may be pleaded to each patent in suit and to each invention included in the charge of infringement. *Gill v. Wells*, 22 Wall., 24. Combination patents may be mentioned as examples where more than one invention may be secured in a single patent, and in such a case the patentee may give the description of each combination in one specification, and in that event he can secure the full benefit to each of the inventions by separate claims, referring back to the proper description in the specification. Cases of the kind often arise, and in such a case the party charged with infringement may plead and prove, if he can, the statute defences to each invention, just as if the two inventions had been embodied in separate patents. Ample support to that proposition is found in the language of the patent act and in the practice of the courts, but where the patent describes an entire invention as a machine, manufacture, or product, the defence specially authorized by the act of Congress must be addressed to the thing patented, and the evidence introduced to sustain the plea or defence must show that the thing patented had been previously patented to another, or that it had been previously described in some printed publication, or that the patentee was not the original and first inventor of the improvement, to entitle the defendant or respondent to a judgment or decree. Parol proof is sufficient for that purpose, if it shows that the thing patented was actually made and reduced to practice prior to the patented invention. Models made and used merely as experiments, and which were not capable of use as operative machines, cannot affect the right of a patentee holding a patent is-

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sued in due form. *Seymour v. Osborne*, 11 Wall., 539. Incomplete attempts to construct a machine amount to nothing as evidence to support such a defence, but if the evidence shows that it was complete and operative, even for a temporary use, and that its existence and use were within the knowledge of a few persons, it may be sufficient to establish the proposition that the thing patented was made and used by another prior to the patented invention. *Coffin v. Ogden*, 18 Wall., 120.

4. Inventors may, if they can, keep their inventions secret, and if they do for any length of time, they do not forfeit their right to apply for a patent unless another in the meantime has made the invention and secured by patent the exclusive right to make, use, and vend the patented product. Within that rule, and subject to that condition, inventors may delay to apply for a patent, but the patent act provides that the defendant or respondent in a suit for infringement may plead the general issue, and, having given the required notice, may prove in defence that the patented invention had been in public use or on sale more than two years before the alleged inventor filed his application for a patent, and the provision in that event also is that if the issue be found for the party setting up that defence the judgment or decree shall be in his favor. Different phraseology was employed in the prior patent act, which made it necessary for the party setting up such a defence to prove that the invention had been in public use or on sale with the consent and allowance of the patentee before his application for a patent. Decided cases, adjudicated under that act and certain earlier acts, show that a very limited public use or sale of the invention with the consent and allowance of the patentee, if prior to his application for a patent, was sufficient to defeat the right of the inventor to the protection of the patent act. *Pennock v. Dialogue*, 2 Pet., 19; *Whitney v. Emmett*, Bald., 310; *Ryan v. Goodwin*, 3 Sum., 518; *Wyeth v. Stone*, 1 Story, 281. Congress, however, interfered, and provided that no patent shall be held to be invalid by means of such purchase, sale, or use prior to the application for a patent as aforesaid, except on proof of abandonment of such invention to the public, or that such purchase, sale, or prior use has been for more than two years prior to such ap-

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plication. 5 U. S. Stat. at Large, 354. Public use, or sale, even under that provision, which was in the nature of an amendment to the earlier patent act, in order to defeat the right of the inventor to a patent must have been for the period mentioned with his consent and allowance. *Pierson v. Eagle Screw Co.*, 3 Story, 405. Unlike that, the present patent act provides that the defending party, having given the requisite notice, may prove that the invention had been in public use or on sale, in this country, for more than two years before the inventor applied for a patent, and that if that special matter is found in his favor he is entitled to the judgment or decree with costs. Construed in view of these suggestions, the better opinion is that the provision in the present patent act is in the nature of a statute of limitations, and that it is sufficient to defeat the right of the applicant to a patent if it be shown that his invention had been in public use or on sale more than two years prior to his application, without proving that it was with his consent and allowance. Due proof of prior invention and practical use by another is sufficient to defeat the right of the applicant for a patent, because it shows that he is not the original and first inventor of the alleged improvement, even if the prior invention was only made and used for a day, if it clearly appears that it was operative, and that it was actually reduced to practice, the rule being one of actual priority as defined by the rules of law and evidence. None of these principles are controverted by the parties in this case, but the defence of prior public use or sale stands upon a different footing, and depends upon widely different proofs. As before remarked, the inventor may, if he can, keep his invention secret, and, if he does, no length of delay will debar his right to apply for a patent ; but if he fails to keep it secret, and it goes into public use or is on sale for more than two years before he applies for a patent, he forfeits all right to the same, and the person sued as an infringer may, if he gives the proper notice, plead that special matter in defence, and, if he proves it, the judgment or decree must be in his favor. In the former case the gist of the defence is that the invention was first made and reduced to practice by another, but in the latter the gist of the defence is that

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the invention, though made by the applicant for the patent, went into public use or was on sale more than two years before the inventor filed his application for a patent. Nothing of the kind is pleaded in the answer, nor is there any proof in the record to support the proposition, if it had been well pleaded. Reliance, for that purpose, in pleadings, is placed upon that feature of the answer in which it is alleged that so much of the invention as is claimed in the second claim of the patent was in public use or on sale more than two years prior to the supposed invention by the complainants. Sufficient has already been remarked to show that such a defence is unwarranted by the act of Congress, which authorizes the defendant or respondent to plead the general issue to the declaration or bill of complaint, and, having complied with the condition as to notice, to give in evidence the special matters enumerated in the same section of the patent act.

Patentees seeking redress for the infringement of their patent must, undoubtedly, allege and prove that they are the original and first inventors of the improvement, and that the same has been infringed by the party against whom the suit is brought. In the first place the burden to establish both of those allegations is upon the party instituting the suit, but the law is well settled that the patent in suit, if introduced in evidence, affords the moving party a *prima facie* presumption that the first allegation is true, and has the effect to shift the burden of proving the defence upon the defending party. *Blanchard v. Putnam*, 8 Wall., 420; *Seymour v. Osborne*, 11 id., 538. Where the requisite statute defences are well pleaded, the defending party may give evidence to overcome that presumption, but if he does not plead and prove those defences, or some one of them, the *prima facie* presumption is sufficient to entitle the moving party to a judgment or decree. Suppose the rule were otherwise, and that evidence may be admitted, though the defence is not pleaded, to show that the invention had been in public use or on sale more than two years before the complainants filed their application for a patent, still the concession would not benefit the respondent in the case before the court, as the record contains no evidence whatever that the invention made by the complainants was

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ever in public use or on sale, even for a day, prior to their application for a patent, nor does the respondent set up any such theory, even in argument. His proposition, in contemplation of law, is altogether different. What he contends is, that the invention was made by others prior to the supposed invention by the complainants, and that the prior invention made by others was in public use or on sale more than two years before the complainants applied for their patent. Knowledge of the complainants' invention was never acquired by the public before they filed their application, nor is there the slightest proof in the record that the invention which they made ever went into public use, or was ever on sale, even in a single instance, before their application for a patent was filed. Even meritorious inventors must keep their inventions secret unless they apply for a patent within two years, and if they do not, and their invention goes into public use, or is on sale in this country for more than that period before they file their application, the invention is forfeited to the public, whether it was in such public use or on sale with or without their consent and allowance, and plea and proof of such special matter is a good defence for one charged with infringement. Infringers may also plead and prove that the patentee of the patent in suit was not the original and first inventor of the improvement in question, and they may prove the issue by showing that the invention had been previously patented by another, or that it had been previously described in some printed publication, or that it had been previously made and actually reduced to practice before the invention was made by the patentee. Such proofs may be introduced, and if they sustain the defence pleaded, the judgment or decree must be for the defending party. These issues, however, are very different from the one raised by the defence that the invention had been in public use or on sale in this country more than two years before the patentee filed his application for a patent, as the latter defence still involves an element of laches on the part of the patentee, in that he did not file his application for a patent at an earlier date, or keep his invention a secret from the public.

5. All the remarks made in respect to the fourth defence, as

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herein arranged, apply with equal force to the fifth defence, which is also overruled for the same reasons. Where none of the defences pleaded are sustained, the *prima facie* presumption that the patentee is the original and first inventor of the improvement must prevail, and the patent in this case must accordingly be adjudged valid.

6. Infringement being denied, the burden of proof is upon the complainants to establish the charge. Where the invention is embodied in a machine, manufacture or product, the question of infringement, which is a question of fact, is ordinarily best determined by a comparison of the exhibit made by the respondent with the mechanism described in the complainants' patent. Comparisons of the kind have been carefully made by the court in this case, and the court is of the opinion that the respondent has infringed the first, second, and third claims of the complainants' patent for the boot-pack. Both parties gave evidence upon the subject, but the great weight of the proofs supports the affirmative of the charge. Strong support to that view is also derived from the answer, in which the respondent admits that he has made forty-four hundred and ninety-one pairs of boot-moccasins, in which the lips and fronts were cut with edges of different lengths and dissimilar outlines, and were united by sewing with a flat seam, substantially as set forth in the fourth claim of the patent; the difficulty being to see how that could well be done without infringing the other three claims of the patent. Without entering further into the details of the evidence, suffice it to say that the court has carefully examined and compared the several exhibits in view of all evidence introduced, and is of the opinion, without hesitation, that the respondent has infringed the first three claims of the patent.

II. Reissued letters patent of the same date were also issued to the complainants for new and useful improvements in the manufacture of moccasin-shoes or shoe-packs, including some of the elements embodied in the patent previously described, and the specification states that the nature of the invention consists in the same peculiarities as those described in the specification of the prior named patent. Special reference is also made to the drawings annexed to the specification for a

description of the various parts of which the invention is composed, to illustrate the relative positions of the several parts of the invention, and the patentees state that there is a free selection of stock in respect to the service each part is designed to sustain when they are put together, and he adds that the principal benefit is found in the fact that the seams can be made flat and be stitched by machinery, thus avoiding all handwork. By the specification it also appears that the quarter is formed in one piece and that it joins directly on to the vamp and forms a flat seam, both at its junction with the top and with the vamp, allowing both of those seams to be stitched by machinery ; and the specification also shows that the vamp is stitched to the other three parts of the thing patented by similar flat lap-seams, thus allowing them all to be closed by the sewing-machine, and without hand-work in sewing the parts together ; and the patentees further state that the different parts of the shoe-pack, as patented, are designed and arranged expressly with a view to enable all the seams to be closed by machinery and to dispense with hand work altogether in sewing, even to the sewing on of the soles, thereby reducing the cost of manufacturing the article very materially, and enabling the shoe-packs to be made more rapidly, economically, and with less expense of material. Three claims are appended : 1. For a moccasin shoe-pack formed of four parts, cut as shown and described. 2. For a shoe-pack with a quarter cut in the form shown in the third figure of the drawings, made in one piece, to surround the heel and extend forward to the vamp, as specified. 3. For the combination in a shoe-pack of the four parts shown and described, when united together by flat lap-seams.

Plenary authority is given to the defending party by the patent act to plead the general issue in a suit for infringement, and, if he complies with the requirement as to notice, he may introduce evidence and prove any one or more of the special matters specified in that act, and if he proves one or more of them he is entitled to prevail in the suit ; but, if he does not give the required notice, he has no right to introduce such evidence, and the moving party, in that event, if he introduced his patent in evidence, is entitled to the benefit of

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the *prima facie* presumption that he is the original and first inventor of the patented improvement. *Agawam Co. v. Jordan*, 7 Wall., 596 ; *Blanchard v. Putnam*, 8 Wall., 427. Separate answers in respect to each patent might have been filed by the respondent, or he might elect to state all his defences in each case in one answer, without waiving any of his legal right, but in the latter case the defences addressed solely to the patent for the boot-pack have no application to the patent for the shoe-pack. Argument to support that proposition is unnecessary, as the statement of the same is sufficient to secure universal assent. Tested by that rule it is clear that the only defence set up in the second case is the denial of infringement.

Suffice it to say, that the complainants having introduced their patent in evidence, must, under the circumstances, be presumed to be the original and first inventors of the patented improvement, inasmuch as there is neither plea nor proof to the contrary. Neither plea nor proof appearing in the record to overcome the *prima facie* presumption in favor of the complainants, the decree must be that the patent is valid, if the proofs are sufficient to establish the charge of infringement. Questions of infringement are questions of fact, in respect to which the parties are chiefly interested in the court's conclusions, and in that view it is not usually deemed necessary to enter much into the details of the evidence, as that would extend the opinion of the court to an unreasonable length. Due comparison of the exhibits has been made in this case, and the court is clearly of the opinion that the charge of infringement is fully proved.

Decree for complainants upon both patents for an account of gains and profits to the extent of the infringement, and for an injunction to the same extent.

W. H. Clifford, for the complainants.

William F. Seavey and *Charles P. Stetson*, for the defendant.

ELIHU HALL ET AL.

vs.

PHINEAS JONES ET AL. IN EQUITY.

The reissued patent No. 5,366, granted to complainants April 22d, 1873, for improvement in hubs for vehicles (the original letters patent, numbered 61,900, having been granted to Alma Warner, February 5th, 1867), *held* to be valid, and the invention therein claimed to be patentable, and that said reissued patent is infringed by the defendants.

(Before NIXON, J., District of New Jersey, September, 1878.)

NIXON, J.

This suit is brought by the complainant, a joint stock company, against the defendants, who are partners in business, for an injunction, account, profits and damages for infringement of certain reissued letters patent No. 5,366, granted to the complainants April 22d, 1873, for improvement in hubs for vehicles; the original letters patent, numbered 61,900, being granted to Alma Warner, February 5th, 1867. The answer of the defendants alleges: 1. That the reissue is void because it contains and claims other and different things than were described and claimed in the original patent; 2, that Warner was not the original and first inventor; and 3, that the defendants have not infringed any of the legal or equitable rights of the complainants.

The matter in controversy concerns the construction of wagon-wheels. The Warner invention is claimed by the complainants to be a patentable improvement upon the Sarven wheel, which may be briefly described to consist of a wooden hub, mortised to receive each alternate tenoned spoke, and the other alternate spokes being shaped at the base in the form of a wedge to fit between the alternate spokes first mentioned, the end of the wedge being cut off and a shallow corresponding notch being cut in the hub to receive it. Cir-

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cular angle-irons are then driven upon the hub, on each side of the plane of the spokes, and are fastened together with small bolts through the spokes. There is thus formed around the outside of the hub, by the arrangement of the spokes, a continuous belt of solid wood. Strength is given to the structure by the two radial bands arranged on each side of the spokes, flanged so as to rest upon the surface of the hub, and to bear against the face of the spokes, and firmly united together by the bolts through the spokes as aforesaid.

It is claimed that the complainants' patent, the Warner invention, differs from this in important particulars : It has the mortised central hub ; it has the metallic ring surrounding it—not two rings held together by bolts, but a single ring with its flanges united by means of webs that form the tapering sockets, into which the shoulders of the spokes are driven. The complainants insist that the annulus thus constructed produces a result which the rings of the Sarven patent are not capable of producing. The spokes that enter these tapering sockets do not rest upon the hub. The end support which they receive is not derived from the hub, but from the sockets, arising from their cuneiform shape, and hence the strain caused by the use of the wheel is not transmitted to the hub, as it is in the Sarven invention. An equally strong wheel is thus obtained from a much smaller hub by the use of the Warner patent. The Warner wheel is further claimed to be an improvement upon the Sarven patent, inasmuch as the web cast between the flanges of the ring separates the spokes and gives to each a firm metallic support, and, dispensing with the bolts, imparts to every spoke the capacity of self-tightening in case of the shrinkage of the wood.

I am not to decide whether the Warner patent in any respect infringes the Sarven. If that were the question I should not hesitate to follow the late Judge Woodruff, of the Second Circuit, who held that the second claim of the Sarven reissue was for a combination of three old devices, to wit ; a wooden hub, tenoned spokes and flanges on each side of the spokes bolted together to assist in resisting lateral strain, and that the combination was infringed by the Warner wheel. But the question is whether there is any peculiar patentable

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quality in the invention of the complainants, outside of the Sarven combination, which the defendants have infringed, and from the continued use of which they should be enjoined. The case is not clear from difficulty, but the difficulty arises more in ascertaining the extent than the fact of the infringement. In other words, it is not easy to decide, in a controversy between other parties, how much of the merits and value of the Warner wheel is due to the invention of Sarven, and how much is due to the invention of Warner. That matter, however, may be inquired into on the reference.

It would serve no useful purpose to exhibit in detail the reason for the conclusions to which I have arrived. Let it suffice, that I have given the testimony, the exhibits, and the very able arguments of the respective counsel an earnest consideration, and that I am of the opinion : 1. That there is a distinct though, perhaps, narrow ground that the Warner patent may occupy, which is not covered by the Sarven invention. 2. That there is enough disclosed in the specifications, drawings, and model of the original Warner patent to authorize and justify the claims of the second reissue. 3. That the structures manufactured and sold by the defendants infringe the first, second, and third claims of the said reissue. 4. That there should be a decree for the complainants for an injunction and an account, and it is ordered accordingly.

Thomas P. How, for the complainants.

Charles F. Blake, for the defendants.

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GEORGE B. TURRELL

vs.

EDWARD SPAETH

SAME

vs.

WASHINGTON I. SNYDER. IN EQUITY.

It does not follow that, because a device is an improvement on the patented device, a party has the right to manufacture and sell it without the patentee's assent.

Although the patented device without the improvement of the infringer added to it, is of little practical value to the owner or to the world, yet, if there be anything new in it, the owner is entitled to damages for, and protection against, its unauthorized use.

Gill v. Wells, 22 Wall., 24, cited and commented on.

Reissued letters patent, No. 7,151, granted to G. B. Turrell, assignee, May 30th, 1876, for improvement in skates, *held* valid.

(Before NIXON, J., District of New Jersey, September, 1878.)

NIXON, J.

The fastening of skates to the feet by the use of clamps is an old device, known in the art long before the date of the Lovatt invention. Hence Lovatt, in his original patent, disclaimed, broadly, the moving of clamps in skates by adjusting-screws, but confined himself in his single claim to a combination of movable V-slotted blocks, with clamps and a screw-rod, arranged substantially in the manner and for the purposes set forth in the specifications. The instrumentalities were old but the arrangements and results were new.

The complainant insists that Lovatt was the first to fasten skates to the feet with adjustable mechanism. Movable

clamps had been used to hold the skate to the sole and heel of the boot, and were retained in position by bolts and nuts, the mechanism for the toe and heel being separate and acting independently one of the other. But here, by the use of a single adjustable screw operating upon the lateral clamps, these clamps are caused to grasp the sole and heel of the boot with all the force necessary and requisite for firmly holding the skate to the foot.

After a careful consideration of the case, as shown in the testimony, exhibits, and arguments of counsel, I am of the opinion that Lovatt is entitled to the credit of the invention claimed by him. He took an important step in the right direction. He brought out the true principle of clamp-fastening in skates, although he did not employ the most efficient instrumentalities for embodying and exhibiting the principle.

The defendant's skate is superior to the Lovatt skate. The popular demand for an article is, in the long run, the best test of utility, and it is not surprising that the skates manufactured and sold by the defendant have substantially driven from the market all those made under the Lovatt patent. But it does not follow because the defendant's skate is an improvement upon the complainant's, that he has the right to manufacture and sell it without the complainant's assent. One cannot thus build upon another man's foundation. It may be that the invention of Lovatt, without the improvement of Day added to it, is of little practical value to the owner of the patent or to the world. Nevertheless, if there be anything new in it, the owner is entitled to damages for, and protection against, its unauthorized use.

These general observations bring me to consider two questions: (1) Whether the mechanism of the defendant's skate infringes the complainant's patent. (2.) Whether the claims of the reissue, on which the suit is brought, can be supported by what is contained in the specifications, drawings, or model of the original patent.

(1.) The complainant's patent, in its latest reissue, contains four distinct claims, each for a combination. The first is for laterally-sliding clamps for grasping the sole, a plate or rest for the foot, and mechanism for moving and holding the

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clamps. The second is for sole and heel clamps, so combined with mechanism for moving and holding the same that one set of clamps acts as a resistance in closing the other set. The third is for certain devices, as laterally-moving clamps, pins, and inclined slats, actuated by mechanism for operating and holding the clamps. The fourth is for a foot-rest, laterally-moving clamps, mechanism for moving and holding the same, by converting a direct forward movement into a lateral movement, and clamps for the heel.

In the reissue each of these combinations is limited by reference to the mechanical devices as substantially set forth in the schedule to the patent. The claims, therefore, must not be construed broadly, as for every possible mechanical means which may be used for moving and holding skate-clamps, but as for the means specified, and every equivalent means for effecting the object.

The defendant's skate—complainant's Exhibit A—is similar to the Lovatt skate in this respect, that the sole and heel clamps are moved by one operation. Are the devices in the defendant's skate, producing this result, the equivalents of the devices set forth in the Lovatt patent?

The experts of the parties, as usual, are as wide as the poles asunder. Mr. Serrell says that they are precisely alike in principle, and Mr. Faber Du Faur thinks they are diametrically different. Assuming that such difference of view arises from the different mediums through which they look at the question, and turning from their testimony, let us look at the skate manufactured by the defendant (Exhibit A), and see what conclusions are reached from what we find there.

We have a clamp-skate, in which are combined the clamp and certain moving and holding mechanism, the essential constituents of the Lovatt invention, and it seems to me that the principle of operation is the same in both structures.

There are differences, but they are differences of form—the substitution of known equivalents for those used in the complainant's patent. The backward and forward movement which imparts to the clamps the lateral grasping of the heel and toe, produced by the longitudinal motion of the screw

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in the one case, is produced by the lever and the eccentrically pivoted cam in the other. Any respectable mechanic, without invention, could make such a substitution, and, if allowable, all patents for combinations would be practically useless.

(2.) The only remaining question is, whether the invention disclosed in the original patent of the complainant will sustain the four claims of the last reissue.

The single claim of the original was for a combination of instrumentalities. These instrumentalities were movable V-slotted blocks, sole and heel clamps, and a screw-rod, arranged in the manner set forth in the specifications and drawings. All of the subdivisions of the combination in the several claims of the reissue are found in the schedule and drawings of the original patent. It does not appear that anything new has been added, or that any matter essential to, or characteristic of, the invention, has been omitted. So far from such a reissue being condemned by *Gill v. Wells*, 22 Wall., 24, as was maintained by the counsel of the defendant, it would seem that the learned judge, who delivered the opinion of the majority of the court in that case, meant to allow it. He says: "Cases arise where a patentee, having invented a new and useful combination consisting of several ingredients which in combination compose an organized machine, also claims to have invented new and useful combinations of fewer numbers of the ingredients, and in such cases the law is well settled that if the several combinations are new and useful, and will severally produce new and useful results, the inventor is entitled to a patent for the several combinations, provided that he complies with the requirements of the patent act and files in the Patent Office a written description of each of the alleged new and useful combinations, and of the manner of making, constructing, and using the same.

"He may give the description of the several combinations in one specification, and in that event he can secure the full benefit of the exclusive right to each of the several inventions by separate claims referring back to the description in the specification; and if by inadvertence, accident, or mistake, he should fail to claim any one of the described combinations,

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he may surrender the original patent and have a reissue not only for the combination or combinations claimed in the original, but for any which were so omitted in the claims of the original patent."

A decree will, therefore, be entered in favor of the complainant for an injunction and an account.

As the case of *Turrell v. Washington I. Snyder* involves the same questions, and was submitted and argued upon the same testimony, a like decree is ordered in that case.

Charles F. Blake, for the complainant.

J. Van Santvoord, for the defendant.

 BADISCHE ANILIN AND SODA FABRIK

vs.

JAMES HIGGIN ET AL. IN EQUITY.*

The reissued letters patent, Division B, granted to Charles Graebe and Charles Liebermann, April 4th, 1871, for an improvement in dyes or coloring matters from anthracine, are valid.

The original patent claimed "the within described process for the production of alizarine, by first preparing bibromanthrakinson, or bichloranthrakinson, and then converting those substances into alizarine, substantially as above set forth." The reissue describes the same process, producing the same substance, and claims, "Artificial alizarine, produced from anthracine, or its derivatives, by either of the methods herein described, or by any other method which will produce a like result." The case was a proper one for a reissue.

(Before WHEELER, J., Southern District of New York, September, 1878.)

WHEELER, J.

This suit is brought for relief against an alleged infringement of Division B of reissued patent No. 4,321, to Charles

* 15 Blatchf. C. C. R., 290.

Graebe and Charles Liebermann, for an improvement in dyes or coloring matters from anthracine, dated April 4th, 1871, and now owned by the plaintiff. The defences set up are, that the reissue of the patent was unauthorized by law and void, because the original patent was not inoperative nor invalid by reason of a defective or insufficient specification, nor by reason of the patentees' claiming therein, as their own invention or discovery, more than they had a right to claim, and because the reissue covers alleged inventions not shown at all in the original ; that the patent is void for want of novelty of the invention, and because it is not for any invention that by law is patentable ; and that the defendants do not infringe.

The original patent describes two processes by which a substance is produced, and some other processes by which one of the substances from which it may be derived is produced, and claims " the within described process for the production of alizarine, by first preparing bibromanthrakinon, or bichloranthrakinon, and then converting those substances into alizarine, substantially as above set forth." The reissued patent, Division B, describes precisely the same process, producing the same substance, and claims, " Artificial alizarine, produced from anthracine, or its derivatives, by either of the methods herein described, or by any other method which will produce a like result." The difference between the original and the whole reissue is, that the reissue, in this Division, claims the product, which the original did not claim. Whether the circumstances *dehors* the patent, required by the statute to authorize a reissue, existed or not, was a matter to be determined by the Patent Office, and, having been determined there, is not open here. Whether the reissue is for the same invention that the original was, and is such as was warranted upon that original, is open. *Russell v. Dodge*, 93 U. S., 460. Nothing is seen to show that the original was not valid for what it claimed. There was nothing defective or insufficient about the specification of the invention. If the statute, by specification, meant that and no more, then, on the patents themselves, it would appear that there was no ground for the reissue. But the word seems to be used in a broader

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sense, and to be intended to cover the specification of the claim, as well. In that sense, there was a defective specification of the invention as patented, and the patent was inoperative and invalid for that part of the invention not covered by the claim. The invention specified in each is precisely the same. The original did not cover the whole of it, and so was inoperative as to part. The reissues do cover the whole. They seem to fall exactly within the intention of the statute, in this particular. *Seymour v. Osborne*, 11 Wall., 516.

It is said, that the reissue attempts to cover more, and is, therefore, void, because it not only claims the substance produced by these processes, but proceeds to claim it if produced by any other method which will produce a like result. If those words enlarge the scope of the claim at all, it does seem that they claim as much as there is of the enlargement that was not in the original, and which, in fact, neither those, nor any other, inventors had then invented. That product, however, is a substance, a composition of matter. If it was new and useful, they were entitled to a patent for it. If entitled to a patent for it at all, they were entitled to one for it, however made. So, if the claim covered it without those words, it covered it as fully, for the purposes of a patent, as with them, and they did not enlarge nor vary the meaning of the claim, nor have any effect upon the patent at all.

It is further said, that the patent professes to be, and is, in fact, a patent for a result, which is not patentable at all. It is true, the claim does make use of the word *result*. If it was used to signify an abstraction, it seems true enough that it would not be for anything patentable. But it is to be read with the rest of the words with which it is connected, and, when so read, its meaning is plain. The claim is for the product that will be produced by those processes. It so says. Then, when it says, "or by any other method which will produce a like result," it means any other method which will produce a like product resulting. So, the claim is all the way for a thing tangible, and not for a mere idea.

It is also suggested, that the substance is not so described in the patent as to make what it is determinable with suffi-

cient exactness. It is called artificial alizarine. That may not be the most exact, nor a very exact, name. But, the patent law does not prescribe how patented articles shall be named. It is described by an exact mode of production, that will not produce anything else. Those who are able to produce it, and those who use it, have no difficulty in knowing or using it. Its character is so complex and intricate, that everything to be found in it could not be told then, and, perhaps, cannot be now. There is nothing in the law that requires all its constituent parts to be described, set forth, or known. The law required the inventors to file such written description of it, and of the manner and process of making, compounding and using it, "in such full, clear, concise and exact terms as to enable any person skilled in the art or science to which it appertains, or with which it is most nearly connected, to make, construct, compound and use the same." Act of July 4th, 1836, § 6, 5 U. S. Stat. at Large, 119; Act of July 8th, 1870, § 26, 16 U. S. Stat. at Large, 201; Rev. Stat., sec. 4,888. This is all the law required in this behalf, and, it is shown by the testimony, both of those skilled in the art and science to which this substance appertains, and with which it is most nearly connected, and those dealing in and making practical use of it, has been done. Those wishing to use it know what to apply for to obtain it, and how to make use of it, when obtained. It is not a mere scientific abstraction, but it is an article of commerce, useful in the art of coloring, that can be bought, sold, handled and consumed. The inventors appear to have done all that could be done, and all that was required, or would be useful, in describing it.

It is insisted, that, at the time of this invention, this product was old, and as well known as it was afterwards, and that what was invented was, in reality, merely a new process of producing it. Whether the product was new with the invention, or was known before, is a question of fact, to be determined upon the evidence. Chemically pure alizarine was unquestionably well known among chemists. Madder alizarine was well known among chemists and artists in dyes. If this is the same as either, it could not be a new invention. If not the same as either, it is not claimed that it is the

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same as any other known thing. The chemists examined as witnesses on each side are of such eminent learning and undoubted character, that the solution of this question is not involved with such difficulties as are sometimes to be encountered in settling questions of fact. A careful examination of the testimony of Professor Chandler, a witness for the defendants, and that of President Morton and Professors Hedrick and Ordway, witnesses for the plaintiff, shows that he differs from them more about names of things, the construction of terms, and inferences to be drawn, than about the actual existence of material facts. Madder alizarine contains chemically pure alizarine, expressed by the chemical notation $C_{14}H_8O_4$. So does this product. So far the witnesses agree; and, so far as that particular ingredient is concerned, the two substances are identical. He regards that as the important thing, and the presence of the other things which each contains, as unimportant and useless, if not injurious, accidents. That other things do exist in each, as they testify, he does not deny. They say that this product contains isopurpurine, anthrapurpurine, monoxanthraquinone, and some other less important ingredients, not named, which were not only not ingredients of either pure alizarine, or madder alizarine, but were not known at all until they were brought out by this invention. He says that purpurine was discovered by Collin in 1828, and anthraquinone by Dumas and Laurent in 1832. Purpurine is chemically different from isopurpurine or anthrapurpurine, and anthraquinone from monoxanthraquinone, as here understood. He does not say that any dye stuff before that of Graebe and Liebermann ever contained isopurpurine, anthrapurpurine and monoxanthraquinone, with pure alizarine, as theirs did and does. So, upon the testimony that is not really contradictory, their product was a new composition of matter. He says these things are mere impurities, whose presence is not wanted, and which are tolerated, because it is better to endure them than remove them, and he produces exhibits to show what colors may be made upon fabrics with them and without them. The others say that they are useful coloring agents, and exhibits are produced to show that fact. From all, it appears that they are influential as coloring

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agents, in producing results differing from those that can be produced without them. So that the product of these inventors, containing them, was not only a new composition, but a new dye stuff. That it is useful, as other coloring materials are useful, is beyond any question. From these considerations it appears that Graebe and Liebermann invented a new and useful composition of matter, for which they properly obtained their original patent, and, so far as is open to inquiry here, their reissued patent.

The claim that the defendants do not infringe rests, apparently, upon the idea, that they only use the product of a different process, and not that they do not use or vend dye stuff substantially the same as this.

The case of *Badische Anilin and Soda Fabrik v. Hamilton Manufacturing Co.*, 13 Off. Gaz., 273, in the District of Massachusetts, before the late eminent Circuit Judge Shepley, covers most of the questions made in this case, but not all of them, for, there is evidence in this case that does not appear to have been in that, and some questions are made here that do not appear to have been made there. So far as that case goes, it is an ample authority for the decision here reached; and, upon the facts found here, it goes nearly, if not quite, as far as this case does.

Let a decree be entered for the plaintiff, establishing the validity of the patent, and for an injunction and an account of profits and damages, occasioned by the infringement, according to the prayer of the bill with costs.

John Van Santvoord and George Gifford, for the complainant.

Gilbert M. Plympton, for the defendants.

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FRANCES L. EGBERT, AS EXECUTRIX, &C.,

vs.

PHILIPP LIPPMANN ET AL. IN EQUITY.*†

The effect of the provisions of the 7th section of the Act of March 3d, 1839 (5 U. S. Stat. at Large, 354), is, to require that an inventor shall not permit his invention to be used in public at a period earlier than two years prior to his application for a patent, under the penalty of having his patent rendered void by such use. Consent and allowance by the inventor are not necessary to such invalidity.

(Before BLATCHFORD, J., Southern District of New York, September, 1878.)

BLATCHFORD, J.

The patent in this case was applied for in March, 1866. The answer sets up, as a defence, that, more than two years before such application, the invention was known and in use in the United States. The bill alleges, that, at the time of the application, the invention had not been, for more than two years, in public use, with the consent or allowance of the patentee. The answer denies that, at the time of the application, the invention had not been, for more than two years, in public use. After the defendants had introduced evidence for the purpose of showing that the invention had been made by others before the patentee made it, the plaintiff introduced evidence showing that the patentee made the invention, a pair of corset steels, in the year 1855. At that time, he made a pair of steels, containing the invention patented, and gave them to a lady, who wore them. They lasted her a long time. He made another pair for her, early in 1858, which she wore a long time. She saw him at work on this pair. She knew, about 1863, of his making, at that time, another pair for another lady. The first two pairs of steels made were

* 15 Blatchf. C. C. R., 295.

† Affirmed by Supreme Court.

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worn in several pairs of corsets, being ripped from one pair and put into other pairs. These first two pairs were made for a lady who, in 1863, became the wife of the patentee. After her marriage to him, and in 1863, she was wearing a pair of corsets with these steels, and she ripped them out, on one occasion, in that year and the patentee showed them to one Sturges, and explained to him how they were made.

The 7th section of the act of July 4th, 1836, 5 U. S., Stat. at Large, 119, provided that a patent should be issued if it should not appear to the Commissioner of Patents that the invention had been in public use or on sale, with the applicant's consent or allowance, prior to his application for the patent. The 15th section of that act provided that, in a suit for infringement, the defendant should have judgment, if it should be proved that the thing patented had been in public use or on sale with the consent and allowance of the patentee, before his application for a patent. By the 7th section of the act of March 3d, 1839, 5 U. S. Stat. at Large, 354, it was enacted, that every person who shall have purchased or constructed any newly invented machine, prior to the application by the inventor for a patent, shall be held to possess the right to use, and vend to others to be used, the specific machine so made or purchased, without liability therefor to the inventor, and that "no patent shall be held to be invalid by reason of such purchase, sale or use prior to the application for a patent, as aforesaid, except on proof of abandonment of such invention to the public, or that such purchase, sale or prior use has been for more than two years prior to such application for a patent." The patent in question was applied for and issued when the act of 1839 was in force. The effect of that act is, to require that an inventor shall not permit his invention to be used in public at a period earlier than two years prior to his application for a patent, under the penalty of having his patent rendered void by such use. Consent and allowance by the inventor are not necessary to such invalidity. But, *a fortiori*, consent to a use in public, not followed by an application for a patent within two years afterward, makes the patent, when granted, invalid. The policy introduced by the act of 1839 is continued in the act of July 8th, 1870, and in the Revised

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Statutes. The 24th section of the act of 1870, 16 U. S. Stat. at Large, 201, provides, that a patent may be obtained for an invention, if it has not been in public use or on sale for more than two years prior to the application for such patent, unless it is proved to have been abandoned. This provision is embodied in section 4,886 of the Revised Statutes. The 61st section of the act of 1870 (*Id.*, 208), now section 4,920 of the Revised Statutes, provides, that it shall be a defence to a suit for the infringement of a patent, that the thing patented had been in public use or on sale in the United States for more than two years before the application for a patent, or had been abandoned to the public. The policy introduced by the act of 1839, and thus continued, is, that the inventor must apply for his patent within two years after his invention is in such a condition that he can apply for a patent for it, and that, if he does not apply within such time, but applies after the expiration of such time and obtains a patent, and it appears that his invention was in public use at a time more than two years earlier than the date of his application, his patent will be void, even though such public use was without his knowledge, consent or allowance, and even though he was in fact the original and first inventor of the thing patented and so in public use. Such public use for such length of time is made equivalent to absolute abandonment.

The use proved in this case was a sufficient public use or use in public, to invalidate the patent. It was not a use for experiment, or a use in private, or a private use. It was a practical use in public of the completed article. No secrecy was maintained or enjoined as to the article or its structure. The fact that the inventor, from time to time, declared that he intended to obtain a patent for the invention, and that his delay was caused by ill-health, cannot operate to destroy the peremptory consequence imposed by the statute because of the lapse of time in connection with the public use.

The bill must be dismissed, with costs.

George Gifford, for the complainant.

John B. Staples, for the defendants.

THE GOODYEAR DENTAL VULCANITE COMPANY ET AL.

vs.

ADOLPH P. PRETERRE. IN EQUITY.*

The reissued letters patent granted to the Goodyear Dental Vulcanite Company, March 21st, 1865, originally issued to John A. Cummings, June 7th, 1864, for an "improvement in artificial gums and palates," the validity of which was settled in *Smith v. Goodyear Dental Vulcanite Co.*, 93 U. S., 486, are infringed when parts of hard rubber plates of teeth are replaced by new parts, made of the materials and according to the mode described in the patent.

The patent is also infringed, when the hard rubber plate formed and holding teeth in the manner prescribed in the patent is made, although it is mounted on a gold plate, which goes between it and the mouth, so that it does not touch the surface of the mouth.

The use of celluloid and rose pearl, in making plates in the manner described in the patent, instead of hard rubber, held to be an infringement, although, in a prior case, in another circuit, such use was held to be not an infringement, but on different evidence.

(Before WHEELER, J., Southern District of New York, September, 1878.)

WHEELER, J.

This bill is brought for relief against alleged infringements of reissued patent No. 1,904, granted March 21st, 1865, to the Goodyear Dental Vulcanite Company, originally issued to one John A. Cummings, June 7th, 1864, and now owned by the orators, for an "improvement in artificial gums and palates." The cause has been heard upon the bill, answer, replication, proofs, and argument of counsel. The validity of the patent has been settled, as against another party, in *Smith v. Goodyear Dental Vulcanite Co.*, 93 U. S., 486, and, on this argument, it is not denied by the defendant's counsel but that it is valid here. It appears that the defendant operated under a license from the patentees up to January 1st, 1871. The

* 15 Blatchf. C. C. R., 274.

only questions made are as to whether he is shown to have infringed since that date. It is claimed by the orators that he is shown to have done so, by making hard rubber plates of teeth, of the materials and according to the mode described in the patent ; by replacing parts of such plates of teeth in like manner ; by making such plates mounted upon gold plate ; and by making plates according to that mode, of celluloid and rose pearl. The defendant denies making any new sets of hard rubber, and claims that the other matters charged are not infringements.

I. Upon the evidence, it sufficiently appears that he has made a few plates of hard rubber within the time in dispute, but not many ; perhaps, four, five, or six. The exact number must be settled by the master. All the testimony may be true, if he has ; but if he has not, some of it must be corruptly false. His conduct about directing the employees to call the material composition, when it is not known by that name, and in not appearing to testify himself in explanation, is more consistent with a use by him of the material known to be unlawful than the contrary. On the whole, this finding, after placing the burden of the proof of infringement upon the orators, is the most satisfactory.

II. The patent seems to be for a plate or set of teeth, formed in a particularly specified mode, of material having certain qualities. The extent of the plate in the mouth of the wearer, either as to surface of the mouth covered, or the number of teeth in the plate, is not made important. It covers one tooth with plate sufficient for it, or more teeth with plate enough for them, according to the requirements of each particular case. It is for so much plate as is needed to hold as many teeth as are wanted. If any plate, formed and holding any teeth according to the patent, is made, the patent is infringed. The defendant's witness Fisk describes the mode of making the repairs complained of. By his description, which is not disputed or varied, it appears that a part of the plate to be repaired is cut away and replaced by new, holding teeth imbedded in it, made exactly as the patented plate is. ~~So much of the plate as is formed in that way is an infringement.~~ It is said that the presumption is that the wearer of

the plate has a right to have it repaired, and that it is no infringement to repair it. But, whether that is so or not, this replacing is not strictly a repair, like replacing a part of a machine, expected to be worn out and intended to be replaced, in the same machine. It is a new manufacture of itself, of the kind patented, embracing in itself all parts of the patented combination. The part added includes the patented product as much as if it were used alone to the same extent, and as much as the part added to would, if unauthorized. It would be as correct to say that a new plate is made out of the old and new materials, as to say that the old plate is repaired with the new materials. More new may be added than remains of the old, or less. The proportion is not important. To the extent of the new, when new plate holding teeth is made, it is new manufacture, covered by the patent, and an infringement.

III. The object of the invention seems to be to fit and attach artificial teeth to the mouth. The defendant's gold plate, mounted with the rubber one holding teeth, is for the same purpose. It appears from the unqualified testimony of the defendant's witness Fisk, as well as from the appearance of the exhibit, that, so far as the rubber plate and the teeth are concerned, it is made precisely as rubber plates not to be so used in mounting gold plates are, that is, exactly according to the patent, except that the rubber may not be made to extend so far into the mouth as it would be if there was to be no gold plate. But, as before mentioned, the extent of the plate is not material to the patent. It is the plate formed and holding teeth in the prescribed manner that is its distinctive feature, extending so far as necessary in each particular case. With the gold plate is the same rubber plate, formed and holding teeth in the same prescribed manner, extending so far as is necessary under those circumstances. The rubber plate is used to attach the teeth to the mouth and hold them in place, by being attached to the gold plate which goes between it and the mouth, instead of touching the surface of the mouth itself. It attaches the teeth to the mouth in the same manner, although not so directly, as without the gold. The patented product is used for the purposes of the

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patent, so far as it is used at all. In that use the defendant employs the whole of the patented invention, by taking it to add his gold plate to. He may have improved it, or may not, by that addition. But, whether he has or not, when he so uses it he infringes the orators' rights.

IV. The defendant is shown to use celluloid and rose pearl in the manner described by the witnesses, in making dental plates. He relies largely upon the decision in *Goodyear Dental Vulcanite Co. v. Davis*, 12 Off. Gaz., No. 14, p. 1, by the late learned Circuit Judge Shepley, in the District of Massachusetts, in support of the position, that the use shown in this case is not an infringement. If that case was exactly like this it should and would have great and controlling weight in the decision of this, both on account of the eminent learning and ability of the court making the decision, and because the same rule ought to prevail throughout the country, in respect to infringement of the same patent by the same means, as well as upon other questions in respect to other subjects, as was so well expressed by the late learned Circuit Judge Emmons, in *Goodyear Dental Vulcanite Co. v. Willis*, 7 Off. Gaz., 41, 44. But, this case, upon the evidence here, is not like that before Judge Shepley, as the facts are stated in his opinion to have appeared there. The patent may well be considered to be established as valid everywhere, but, whether parties have infringed it in particular cases must depend upon the proof in each case. The owners of the patent may be able to prove infringement in one case and not in others; but, proving it infringed in one case will not show that all others charged to be infringers are so, nor will failures show that none others charged are so. It is only when the facts of the cases are alike, that one ought to control another.

In that case, the question was, whether the patent for a plate of teeth made of rubber compounded with sulphur, and subjected to heat to harden it, would be infringed by plates of teeth made of celluloid, shown to be "a new material discovered and patented since the date of Cummings' invention," in the manipulation of which, "the process of making a set of teeth composed of the plate, and teeth, and gums, is an entirely different process from that described in the Cummings

patent when compared with that part of the Cummings process which was new in the state of the art, and the novelty of which part gave to the Cummings process, when considered as a whole, the ingredient of novelty and patentability ;" when it was " not placed in the mould in a soft, plastic condition, ' a little at a time pressed in with the finger, or in any other convenient way,' but in a hard, rigid condition, like horn, or bone, or ivory," and " then subjected to heat, not to vulcanize or harden, but to soften it ;" and which, " afterwards, on being cooled or restored to its original temperature, returns to its original condition as a hard substance, as when first placed in the mould ;" from which it appeared " evident to the court that the use of " the celluloid, in the manufacture of sets of artificial teeth, as practised by those defendants, and the manufacture itself, differed " as much, both as to process and product, from the process and product described and claimed in the Cummings' patent, as that process and that product differed from the previous manufactures which existed before the Cummings invention, and were unsuccessfully relied upon as anticipating it."

In this case, it appears, from the evidence, that the celluloid and rose pearl in use by the defendant, whether actually the same as that material in that case or not, were well known at the date of that invention ; and, from the testimony of the defendant's witness Fisk, that, in use, it is softened in boiling water, and made plastic before it is put into the moulds ; and, from defendant's witness Parmelee, that vulcanized rubber is soft when hot, and becomes hard by cooling ; and also, from the witness Fisk, that the means employed for fastening the teeth to the plate are the same in respect to each substance, and that, when the celluloid plate is completed, " its structure is precisely the same as that of a vulcanite dental plate, except that the base of one is made of celluloid, and the other of vulcanite," and that they are so much alike that any one might mistake one for the other, and patients seldom notice the difference.

It is obvious, from this statement, that this case, upon its facts, is radically different from that, and should not be controlled by the decision there, further than the same principles

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are applicable to both. That decision does not seem to proceed exactly upon the ground that there could be no equivalent for vulcanite, but rather upon the ground that what was claimed to be an equivalent was not in fact so.

The invention seems to be, of a combination, in a dental plate, of the plate proper, holding the teeth imbedded into it, and made fast in the mode described, with the teeth themselves. The material of the plate is of chemical formation, but the operation of the plate, when formed, is mechanical. The teeth are the main object. The plate is for the purpose of holding them in the right position in respect to the mouth. It is held in place itself principally by atmospheric pressure, and holds the teeth in place by its mechanical strength. The rubber plate is very useful for this purpose, on account of its lightness, slightly yielding rigidity, and capability of the material for being fitted into the mould when soft, and becoming hard in exactly the shape of the mouth, without shrinking. The celluloid shown here appears to have the same qualities and capability in these respects. The mode of taking the impression of the mouth, and making moulds for the plate and teeth, of plaster, by using wax, was old. Rubber, the mode of vulcanizing it, and vulcanite itself, were old. Moulding vulcanite into shapes wanted was old. Cummings invented combining it, when hot and plastic, with artificial teeth, by moulding it about them in their proper position, so that the whole would be in the required shape and relative position, in one solid piece, when the rubber should become hard. Celluloid was old. The defendant, with moulds made by the same method as Cummings', combines that with artificial teeth, by moulding it about them, when hot and plastic, so that the whole will be in one piece, in the required shape, with the teeth in their proper position, when it becomes hard; and, when the products of these processes are done, they are so near alike, that persons using them do not distinguish one from the other. The celluloid is, for this purpose, clearly the mechanical equivalent of the vulcanite. Chemically, they are, in some respects, different, but, in all that are of any importance, for the purposes they are here wanted for, they are

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the same. They burn differently, but they are not wanted for burning. They come to the plastic state, in which they can be put into the moulds, by chemical and widely different processes. The process by which they are converted, from masses in that state, into finished dental plates, so inheres in the product, that it is said to give distinctive character to it. That process begins with the moulding. The point is not, whether the substances were ever equivalents for these, or any other, purposes before, but whether they are equivalents for this purpose then, and it seems that they are.

It is said, by Mr. Justice Clifford, in *Gould v. Rees*, 15 Wall., 187, 194, and in *Gill v. Wells*, 22 Wall., 1, that inventors of a combination are as much entitled to equivalents as the inventors of other patentable improvements, if the equivalents were known to be such at the date of the patent. Judge Shepley, in *Goodyear Dental Vulcanite Co. v. Davis*, before mentioned, either intentionally or inadvertently, said, in respect to the same thing, "the date of the invention." Some question has been made about which date controls, if either does absolutely. Perhaps it is the date of the patent, because the patent is a grant, and, as such, must speak from its date. But, whichever date should control, or whether either should, is not material in this case, for the evidence is full that celluloid and rose pearl, with their moulding and other qualities useful to this manufacture, were well known at both dates.

Under the reasoning of the court in *Smith v. Goodyear Dental Vulcanite Co.*, 93 U. S., 486, in which the validity of the patent was held, if Hawes, there mentioned, had been shown to have used celluloid or rose pearl, as the defendant now uses them, instead of tin, as he was shown to have used that, in making dental plates, the patent could not have been maintained. He would have been entitled to the patent instead of Cummings. Celluloid itself may be patentable and patented, but the use of it in this manner, in the formation of dental plates, could not be, in the light of Cummings' invention; and, whether the invention of this use of them would be patentable, in the view of the other patent, is one accurate test of whether it is an infringement of that patent. Curtis on Pat., §§ 321 to 323; *Walton v. Potter*, 4 Scott, N. S., 91.

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Let a decree be entered for an injunction and an account in respect to these infringements, with costs, according to the prayer of the bill.

Edward N. Dickerson and Benjamin F. Lee, for the complainants.

Henry Baldwin, for the defendant.

ELISHA CROWELL

vs.

N. E. HARLOW. IN EQUITY.

The complainant's patent was for a process of curing and putting up fish, which in the claim was described to be—to take out the principal bones and fins while the fish is fresh, and, when partly cured and dried, to remove the skin and with it the entire mucous membrane, and to pack in boxes of convenient size. The novelty consisted in the removal of the mucous membrane. Upon an application for a preliminary injunction, the evidence of infringement was very meagre, and quite insufficient, unless it was aided by the affidavit of the defendant himself, who said he prepared the fish by removing the skin, and then the bones, and then packed it in boxes. He did not say whether he removed the mucous membrane or not, and there was no evidence whether in removing the skin the membrane was necessarily removed; but he denied the novelty of the invention: *Held*, that the application must be denied.

(Before LOWELL, J., District of Massachusetts, September, 1878.)

LOWELL, J.

This suit and another like it (No. 949a, *Same Complainant v. George Harlow*) are brought against two persons who are said to infringe the patent of John Atwood, No. 90,334, granted May 25th, 1869, for an improved process of curing and putting up fish. The claim is for the whole process described, which is to take out the principal bones and fins while the fish is fresh, and when partly cured and dried to remove the skin and with it the entire mucous membrane, and to pack in

boxes of convenient size. I understand the novelty, as claimed in argument, consists in the removal of the mucous membrane.

The evidence of infringement is very meagre and quite insufficient, unless it is aided by the affidavit of the defendant himself, who says that he prepares the fish by removing the skin, and then the bones and packs in boxes. He does not say whether he removes the mucous membrane or not, and there is no evidence whether in removing the skin the membrane is necessarily removed. If it is not, there is no infringement; if it is, then the remaining part of the defendant's affidavit is likely to be true that the process is old and was well known to him in Plymouth before 1869.

It is not the practice to grant a preliminary injunction, which often operates as a final determination of the cause, when the patent has never been passed upon, unless there has been acquiescence equivalent to a general admission of its validity, or there are some other strong reasons for such summary action, if it appears that the defendant in good faith intends to litigate the validity of the patent. I do not hold the rule quite so strictly with respect to a disputed question of infringement, because that may sometimes be determined as well by an inspection of the two things as it ever can be by evidence of any kind.

I do not pass at all upon the question of novelty, because the record is not such as to enable me to form a judgment upon it. The patent on one side is opposed to an affidavit of personal knowledge on the other, and I cannot say with sufficient certainty that the patent is undoubtedly valid.

Motion denied.

John R. Bennett, for the complainant.

Charles H. Drew, for the defendant.

Crowell v. Parmenter.

ELISHA CROWELL

vs.

HENRY A. PARMENTER. 'IN EQUITY.

Where the complainant licensed the defendant, and, as a part of the contract, agreed that he would sell no licenses for less than a certain price, and the defendant having failed to pay his royalties, the complainant filed his bill for infringement, and moved for a preliminary injunction, upon which motion, it was shown that the complainant had granted licenses for a less consideration and in such a way as to injure the defendant : *Held*, that the injunction should be refused.

Under such circumstances, a court of equity will not grant an injunction to the complainant in advance of the trial or hearing at which the accounts and damages may be properly adjusted between the parties.

(Before LOWELL, J., District of Massachusetts, September, 1878.)

LOWELL, J.

The motions in this case, and several others (No. 944a, v. *George G. Tarr* ; No. 945, v. *George W. Adams* ; No. 945a, v. *Sylvanus Smith* ; No. 946, v. *Charles H. Pew* ; No. 946a, v. *James G. Tarr* ; No. 947, v. *J. J. Stanwood* ; No. 947a, v. *James L. Shute* ; No. 948, v. *Charles C. Cressey*, and No. 948a, v. *Samuel Lane*), are founded on the same patent for curing and putting up fish which is relied on in *Crowell v. Harlow*. In the cases now under consideration, the several defendants had, as tenants in common, an exclusive license or grant, which, as they contend, gives them full power to use the invention to the end of the term. They admit a failure to pay the royalties agreed on, but contend that the license is not conditional, and that no right of resuming his grant has been reserved to the plaintiff, but that he must bring his action at law for the royalties, or his suit in equity for an account of those royalties, from time to time as he may be injured ; a different and less stringent remedy than that which is sought by this bill.

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I shall not discuss this issue at the present time. I shall assume that, under the frame of the bill, the plaintiff can have some remedy in this court as well as in a court of law. The reason why I refuse this preliminary and peremptory injunction moved for is, that by the contract between the parties, and as a part of it, in consideration of the agreements on the part of the defendants, the plaintiff agreed that he would sell no licenses for less than a certain price, and there are numerous affidavits which declare that he has sold such licenses for a very much smaller consideration, and in a way which seemed intended to deceive the defendants, and which would seem calculated to injure them in their exclusive rights. These affidavits are wholly uncontradicted, and must be taken at this hearing to be true. Under these circumstances, a court of equity cannot lend its most stringent remedy to the plaintiff in advance of the trial or hearing, at which the accounts and damages may be properly adjusted between the parties.

Motion denied.

John R. Bennett, for the complainant.

Charles Levi Woodbury and Charles P. Thompson, for the defendant.

ROBERT F. SIMMONS ET AL.

vs.

WILLIAM BLACKINTON ET AL. IN EQUITY.

Where a patented invention possesses peculiar advantages, derived from mode of construction, which are not found in prior devices of generally a similar character, there is sufficient utility to support the patent.

Letters patent No. 193,543, for "an improvement in ornamental chain links," the claims of which are: "1. The combination, in a box-chain link, of the independent perforated and externally-plated sides, A, having

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mitred edges, and soldered together at said edges or from the inner side of the link, substantially as specified," and "2. The combination of the perforated sides A having plated exterior surfaces, and mitred joints at their edges, united internally by solder *s*, and the end rings, B, entered and soldered within the open ends of the box-link formed by the sides A, essentially as described," *held* valid.

Such invention is limited to links made of *plated metal*, and is not anticipated by a *solid* gold link with open sides, and mitred together at the corners of the blanks or pieces of which it is composed; nor by a link made of plated material, but so constructed that the material must be plated on both sides, and, therefore, without the advantages pointed out in the patent, of saving the more precious material obtained by the process of rolling the gold or silver upon one side only of the strip of inferior metal.

(Before CLIFFORD and LOWELL, JJ., District of Massachusetts, October, 1878.)

LOWELL, J.

The complainants are the patentees in letters patent No. 193,543, of an invention of Ernst Nortemann, which was assigned to them after the application for the patent and before its issue. The title is, "An improvement in ornamental chain links." The specification declares that the object of the invention, as applied to gold or silver-plated ornamental chains, is to produce a plated chain having certain of its links of a box-like or tubular construction, and with ornamental perforations in its sides, thus giving lightness, as well as beauty, to the chain, which, moreover, is capable of taking a fine finish. It describes the invention as consisting in a box-link having three or more perforated sides, each of which latter is made of a separate piece of plated metal, beveled at its edges, so that when the several sides are put together they form a mitre joint, and are united by soldering from the inside of the link, the plated surface being on the exterior of the latter. By this construction of the box link, the specification proceeds, the plated surface of the link is kept intact at the edges, corners or angles of its sides, and said edges are brought up sharp with the plated surface wholly on the exterior of the link and without any exposure of the inside solder, by which the sides are united. End links are also combined with the box-link to connect said link

with other links, etc. There is then a full description of the mode of making the links, with appropriate figures. The method is to take brass stock in the form of a plate, which is coated or plated with gold or silver on one surface by rolling, and, after cutting this plate into suitable strips, to cut out a series of blanks, in which ornamental perforations are then made, and they are afterward beveled on the inner or stock side by the action of revolving burrs or cutters. The necessary number of sides having been made they are soldered together on the inside. The inventor repeats that by thus constructing the box-link, the plating on the outside is brought up as sharp on the edges as if it were made of gold or silver, and the plated surface is preserved intact on the edges. Neither is any gold or silver wasted, as all the plating is on the outside of the link; and by making the perforations in the blanks, a highly ornamental and light, hollow or box-link is easily and cheaply produced.

The claims are: "1. The combination, in a box-chain link, of the independent perforated and externally-plated sides A, having mitred edges, and soldered together at said edges on or from the inside of the link, substantially as specified.

"2. The combination of the perforated sides A, having plated exterior surfaces, and mitred joints at their edges, united internally by solder, s, and the end rings, B, entered and soldered within the open ends of the box-link formed by the sides A, essentially as described."

These quotations have been made from the specification, because while the defendants' links are admitted to come exactly within the specification and claims, they insist that the patent is for a link of the box-like form, of whatever material it may be made, including solid gold or silver, and that if there are any special features adapted to plated chains, they are only incidental and do not limit the invention. The plaintiffs, on the other hand, contend that the patent is for a new article of plated links. The question is important in view of the state of the art in 1877.

We are of opinion that the description of the patent, and more especially the language of the claims, clearly con-

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fine the inventor to links made of plated metal. Both claims are expressly limited to this.

Under this construction we have carefully examined the two links which the evidence shows to have been made before the date of the plaintiffs' invention, represented by the Exhibits "Bidet 1," and "Blackinton 1."

"Bidet 1" is a solid gold link, with open sides, and mitred together at the corners of the blanks or pieces of which it is composed. If this link showed substantially the construction of the plaintiffs' link, then, though that construction might serve a peculiarly useful purpose when used in plated work, it would be impossible to sustain a patent for it, notwithstanding the fact that they have confined their claim to plated links, because the supposed invention would be merely a change from one known material to another: *Hotchkiss v. Greenwood*, 11 How., 248; *Hicks v. Kelsey*, 18 Wall., 670. But the peculiar advantages which the link, as a plated link, derives from its mode of construction would not be found in one made after the model of "Bidet 1," and, therefore, a small field of invention is left on which the precise link made by the plaintiffs and copied by the defendants may rest.

The other link is made of plated material, but so constructed that the material must be plated on both sides, and, therefore, without the advantage which the specification distinctly points out of the saving of the more precious material obtained by the process of rolling the gold or silver upon one side only of the strip of inferior metal. This appears to us to be a sufficient utility to support the patent.

We, therefore, decide that the plaintiffs' plated link is new as a distinct article of manufacture. The infringement is admitted.

Interlocutory decree for the complainants.

Smith & Bates, for the complainants.

George D. Noyes, for the defendants.

JOHN S. PERRY ET AL.

vs.

GEORGE STARRETT. IN EQUITY.

The complainants obtained a patent for a design for a stove; one Smith, another inventor, subsequently applied for a patent for a similar design. An interference was declared, and Smith was adjudged by the Patent Office to be the first inventor of the design: *Held*, that this decision was not conclusive on the complainants, so as to prevent them from bringing a suit for infringement of their patent.

Although, in a design patent, certain parts may resemble parts of other patented designs, yet, if the general result is different from anything known or used before, such difference indicates inventive genius and creative skill, and the design may be patentable.

To constitute infringement of a design patent, the designs must be so similar as to appear to ordinary observers to be the same, but need not be so nearly alike as to appear to experts to be the same.

If two designs are substantially similar, the fact that different names or trade marks are or may be used in connection with them will not distinguish them sufficiently.

Design patent No. 7,456, granted to John S. Perry, Andrew Dickey and Absalom C. Williams, May 26th, 1874, for a design for stoves: *held*, valid.

(Before WHEELER, J., Southern District of New York, October, 1878.)

WHEELER, J.

This bill is brought for an alleged infringement of design patent No. 7,456, issued May 26th, 1874, for a design for stoves called the "Argand."

The defences are: want of novelty in the invention patented; that the patent is void because it claims too much; and denial of infringement.

The statute provides, among other things, that any person who by his own industry, genius, efforts and expense, has invented and produced any new and original design for a

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manufacture, or ornament to be cast on any article of manufacture, the same not having been known or used by others before his invention or production thereof, or patented, or described in any printed publication, may obtain a patent therefor. Act of 1870, Sec. 71; Rev. Stat., Sec. 4,929.

This patent was issued under this statute, and has five claims. The first is for the form and outline of the parts for a design for a stove; the second, for the ornamentation for a design for a stove: the third, for any one of the plates having the form and outline for a design, all as described and represented; the fourth, for the ornamentation, as a design, for any one of the plates; and the fifth, for the form and outline and ornamentation for a stove, each as represented. The first, second and fifth are the only ones upon which a decree is sought.

It might be questionable whether the first claim could stand for the parts of a design separately, as a design, from its nature, is an entirety, if it is anything. But, however that may be, it is insisted for the orators that the claim is in effect for the form and outline of a design for a stove. The parts together would constitute the whole, and perhaps it is the same as if the mentioning the parts had been left out. Then it would be for the form and outline of the design. These claims, with the first thus considered, stand as claims for the form and outline and ornamentation, as separate designs, and for them together as one design.

As the novelty of the invention is in issue, it is necessary to ascertain what designs of this sort were in use before it, for it must be new with reference to all others known or used before.

There is controversy as to whether one kind of stoves, as it embodies a design for the form of a stove or the ornaments, was in existence before or not. This controversy is with reference to the Smith stoves, so called, said to have been like defendant's Exhibit 15¹, which, itself, had not then been made, and none like it that had been are shown. Mr. Smith, the inventor of that stove, applied for a patent for his design after the one in suit had been granted, and a question of interference between him and these patentees was raised

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in the Patent Office, and decided by the Examiner of Interferences. In making that decision it was found that Smith was the first inventor of the design he sought a patent for.

It is argued for the defendant, that this finding is conclusive here. But, by the provisions of the statute, it would not be conclusive upon the validity of the Smith patent even, so far as question upon it might arise in court. Rev. Stat., Sec., 4,914. The patent of the orators was not there in controversy. The question to be determined was whether a patent should be issued to Smith. The finding was incidental to that question. And, however it might be as between the orators and Smith, it was not any finding between the parties to this suit. The defendant was not a party there and could not be bound, and such estoppels must be mutual to be operative. If both parties are not bound, neither is.

That a stove of substantially the same construction as Exhibit 15¹ was in existence before, appears upon the evidence beyond any fair doubt. That it had the same ornamentation does not satisfactorily appear. The shape of the shell was probably substantially the same. There may have been slight differences, and may not. The stoves called the "American," and the "Light-House," and the "Oriental" were in existence before.

The ornamentation of the Smith stoves, which were in existence before, is not shown to have been at all like that of the orator's stove, the Argand. Assuming the shape of those Smith stoves to have been like that of Exhibit 15¹, they had not as a whole, the form and outline of the Argand. There are some features of them and of the Argand that are considerably alike. Their legs, ash-pit sections, and lower mica sections, with their rear extensions, and their upper mica sections, except as to the rear extension of that of the Argand, are in shape quite similar. The rest of them are very different from each other. The bases of the Light-House and the Argand, the reservoir sections of the American and the Argand, the tops and urns of the Light-House, the Oriental, and the Argand are all somewhat alike.

Upon these similarities it is argued for the defendant that the patentees have only taken those parts of the other designs

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and put them together, in mere aggregation, to produce their design, and that in so taking them and putting them together they did not accomplish anything patentable. It is quite clear that any one who should take pages or leaves from several books and put them together into a new book, or take parts of several musical compositions and put them together into a composition by themselves, would not be entitled to a copyright for these productions. *Reed v. Carusi*, Dist. of Md., 1845, 8 Law Rep., 410. And if all the patentees did was to take the legs of the Smith stove, the base of the Light-House, the ash-pit and mica sections of the Smith stove, the reservoir and top of the American, and the urn of the Oriental, and join them together, it is also clear that they did nothing entitling themselves to a patent. *Binns v. Woodruff*, 4 Wash., 48; *Wooster v. Crane*, 2 Fish., 584. Or, if they did no more than to join them together with such adaptations to each other as would be made by the exercise of the ordinary skill of workmen in that trade, probably they did not. But the evidence shows that they did much more than either. Although the legs of the Argand and of the Smith stove are *cyma reversa* in general form, those of the Argand are quite different from the others in proportion and style. The base of the Argand is not exactly like that of the Light-House. The curves of its ash-pit section are different from those of that section of the Smith stove. The lower mica section of the Smith stove is convex below and concave above in outward form, while that of the Argand is slightly convex throughout. The lines and curves of the mica section of the Argand are different from those of the Smith stove, and in the Argand the rear extension, to include the exit-pipe, is carried upward on that section, while in the Smith stove it is not. And the top and the urn of the Argand differ somewhat from those of either the Light-House or the Oriental.

All these parts were made symmetrical of themselves and in respect to each other, and connected together with appropriate devices, and formed into a harmonious whole, in a manner that could not be done without inventive genius and creative skill. The result was different from anything used or known before.

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In *Gorham Company v. White*, 14 Wall., 511, it was held that, to constitute infringement of a design patent, the designs must be so similar as to appear to ordinary observers to be the same, and that they need not be so near alike as to appear to be the same to experts. It would seem to follow that to constitute a new design that would be patentable as such, it must be so different from all others existing before, as to appear to be such to the same class of ordinary observers. Tested by this rule, upon the effect of all the testimony in the case, as well as upon an inspection of the stoves themselves, and considering the Smith stoves to have been in form like Exhibit 15¹, the Argand was new in design in its form and outline. And so of the ornamentation. Well-known devices for ornamenting in different places, upon different articles, were employed; but they were arranged with reference to one another, and upon different parts of the stove with reference to what would be suitable there, so as to produce a new effect. It follows directly that the new form of the stove and new ornamentation upon it together made up a new design for the whole. It was invented and produced by the industry, genius, efforts and expense of the patentees, and according to the statute they were entitled to a patent for the form and ornamentation separately, and for the whole together. If the first claim had stood as a claim for the different parts of the design severally, as described in the specification, there might be a question as to whether some of these parts, by themselves, were not so nearly like the corresponding parts of some of the existing designs as to be substantially the same, and so whether they had not claimed some parts to which they were not entitled. But, upon the construction given to that claim, no such question arises, and it is not shown, in any manner, that they did in any of their claims really claim too much. And, if they did, it does not appear that they would have done so with any wilful default, or intent to defraud or mislead the public, without which the patent would not be absolutely void. Rev. Stat., Sec. 4,916; *O'Reilly v. Morse*, 15 How., 62. Upon these considerations the patent, as to the first, second and fifth claims, appears to be valid.

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What is claimed to be an infringement is the sale of stoves called by the name of "Hecla." The question as to this part of the case must be as to the substantial identity of the design of them with that of the Argand, within the rule in *Gorham Company v. White*. The most potent evidence is a comparison of the stoves. In appearance they are substantially alike from top to bottom, and so whether viewed as a whole or section by section. There are minor differences both in form and ornamentation, but the general effect is the same. It requires study of the differences that exist, and fixing them in the mind, to be able to tell one from the other when they are not side by side. They are not only so alike as to deceive ordinary observers, but so as to deceive dealers, large and small, and the ordinary observation of experts, without they go far enough to observe what are really trade-marks. This is not only the result of a comparison of the stoves, but is the effect of the testimony. It is said that they can be distinguished by their names as well as by these marks, and that, therefore, no one would be deceived. This might be true, if the names or trade-marks could always be observed, but they may not be. And, if they should always be, the right to have the products bearing the design distinguished from others is not what is granted by the patent. The patent gives the exclusive right to make, vend and use stoves of that design during the life of the patent. Knowledge of the origin of the patented articles may not be, and probably is not often, the object of the purchaser. The patentees have given the public the benefit of the design, as the fruit of their skill and outlay, and the orators are entitled to a monopoly of the products embodying it during the prescribed time.

Let a decree be entered for an injunction and an account accordingly, with costs.

Samuel A. Duncan, for the complainants.

Charles J. Hunt, for the defendant.

JOHN J. SCHILLINGER

vs.

HERMANN A. GUNTHER. IN EQUITY.*

The claim of letters patent for an improvement in concrete pavements was, "The arrangement of tar paper, or its equivalent, between adjoining blocks of concrete, substantially as and for the purpose set forth." Under an interlocutory decree for an account of profits, the plaintiff did not prove before the master any license fee, as showing the value of the patented improvement, nor did he show such value otherwise. The reference and the master's report proceeded on the view that all the value in the infringing pavement was due to the patented improvement, and the master reported, as profits, the profits made by the defendant in laying the entire pavement: *Held*, that the master should have reported no profits.

(Before BLATCHFORD, J., Southern District of New York, October, 1878.)

BLATCHFORD, J.

The plaintiff's patent is for an improvement in concrete pavements. Such pavements existed before the plaintiff's invention. The specification of the patent states that the invention "relates to a concrete pavement which is laid in sections, so that each section can be taken up and relaid without disturbing the adjoining sections." The invention relates merely to the laying of the pavement in sections, so as to "allow the blocks to be raised separately without affecting the blocks adjacent thereto," and so as to allow "the several blocks to heave separately from the effects of frost." There is nothing new in the composition of the pavement, as one formed of concrete made "by mixing cement with sand and gravel or other suitable material, to form a plastic compound." The point of the invention, as set forth in the specification, is, that, the pavement being made in sections,

* 15 Blatchf. C. C. R., 303.

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the joints between the sections have placed in them "strips of tar paper, or equivalent material, arranged between the several blocks or sections, in such a manner as to produce a suitable tight joint and yet allow the blocks to be raised separately without affecting the blocks adjacent thereto." It was not new to lay concrete pavements in sections. The plaintiff after this suit was brought, filed a disclaimer disclaiming any claim merely to the laying of a concrete pavement in detached blocks or sections, without the interposition between the blocks or sections of the tar paper or its equivalent, and admitting that it was not new to lay a concrete pavement in sections. As the specification, before the disclaimer was filed, stated, the concrete, when laid in blocks without the interposition of the tar paper or its equivalent, in the joints between the blocks, would shrink in setting, so that the second-laid block would not adhere to the first-laid block, and the joints would "soon fill up with sand or dust," and the pavement would be "sufficiently tight for many purposes," while the blocks would be "detached from each other," and could be "taken up and relaid, each independent of the adjoining blocks." The disclaimer "disclaims the forming of blocks from plastic material without interposing anything between their joints while in the process of formation." By the "tight joint" produced by the interposition of the tar paper or equivalent material, the specification states, that the patentee means, that the tar paper "constitutes a tight water-proof joint." The specification sets forth, that, after one block or section is completed, the tar paper is placed along the edge where the next block is to be formed, and the plastic composition for the next block is put up against the tar paper; that the tar paper does not adhere to the block first formed, when placed against it, although it may adhere to the edges of the block formed after it is put in its place in the joints; and that, hence, the joints between the blocks are free, so that each block can be removed separately. The specification describes the mode of making the blocks to be, to spread the plastic mass on the bed of the pavement, "either in moulds or between movable joists of the proper thickness," so as to form the edges of the blocks, one block

being formed after the other, the joists or partitions between the block first formed and the block next to be formed being removed after the block first formed has set, and the second block being next formed, "each succeeding block being formed after the adjacent blocks have set." Nothing is claimed as new in respect to this mode of forming blocks of concrete pavement. The sole claim of the patent, left after the disclaimer, is this: "The arrangement of tar paper, or its equivalent, between adjoining blocks of concrete, substantially as and for the purpose set forth." It was, therefore, open to the defendant to lay a concrete pavement in detached blocks or sections, by the use of moulds, or movable joists or partitions, in the manner described in the plaintiff's specification, each succeeding block being formed after the adjacent blocks have set, and, to avail himself of the fact affirmed in the plaintiff's specification, that, without the use of tar paper, or its equivalent, interposed in the joints, the concrete will, in setting, shrink, so that the second block, when set, will not adhere to the first, and the blocks, when completed, will be detached from each other, and thus to make a concrete pavement in sections, which can be taken up and relaid, each independent of the adjoining sections. It may be, that, without the use of something extraneous to make a joint, such as the permanent interposition of tar paper or equivalent material between the blocks, or the creation of a joint, by inserting a trowel or other cutting instrument between the blocks, and then removing the instrument, leaving the joint an open one for the time, the detachment of the blocks from each other will not be as effectual or complete as when a joint is formed by the interposed tar paper or trowel, and the blocks cannot be as easily or completely taken up and relaid, each independent of the adjoining blocks. The claim of the plaintiff's patent is for the interposition of the extraneous material to form the joint, whether the permanent tar paper or the temporary trowel or cutting instrument. It is for the artificial division of the pavement by the joint thus made, aside from, and in addition to, any division resulting from the shrinking, in setting, of the concrete in the second block, when placed against the completely set concrete in the first block. I do not un-

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derstand that the plaintiff, by his disclaimer, affirms that anything stated in his specification is not true, or affirms that it is not true that if the sections are made without the interposition of anything, either permanently or temporarily, between the sections, the blocks will be "detached from each other, and can be taken up and relaid, each independent of the adjoining blocks." All that the disclaimer affirms is, that the plaintiff was not the first to invent what he disclaims, but that it was previously invented by some one else. It does not affirm that the plaintiff did not invent it at all, or that the effect set forth in the specification as resulting from laying the pavement with nothing interposed in the joint, either permanently or temporarily, will not result. A correction of a mistake as to the statement of the effect of laying the pavement in sections, without interposing any thing in the joint, is the office of a reissue and not of a disclaimer.

There was an interlocutory decree for the plaintiff on the 22d of April, 1875, adjudging that the plaintiff's patent was valid, and that the defendant had infringed it, and referring it to a master, "to take and state and report to the court an account of all such concrete pavement or sidewalk made, or caused to be made, or used or sold, by the said defendant, since the 2d day of May, 1871, and also the gains and profits which the said defendant has received by or from the manufacture, use or sale of the said patented improvements; and that he also ascertain and report what, if any, damages the said complainant has suffered or sustained, by reason of the said infringement, over and above and beyond said gains and profits." Subsequently, an order was made setting forth, that "it appears to this court, that the defendant has made or laid sectional concrete pavements or sidewalks in different methods or modes of construction, all of which methods are claimed to be in violation of said patent," and ordering that the master proceed in said accounting, under the said decree of April 22d, 1875, "and take and state an account of all the sectional concrete pavements or sidewalks made or laid by the defendant, or under his authority, since the 2d day of May, 1871, specifying, as far as may be, the method or methods

pursued by the defendant in making or laying the same, and the amount laid under each method, if more than one, to the end that, in the decree that shall be made upon the master's report, it shall be determined and decreed whether all of the methods of laying concrete pavement which have been practised and pursued by the defendant, are or are not within the patent which has been adjudged to be good and valid, and to have been infringed by the defendant, and whether the defendant is, therefore, liable to pay to the plaintiff damages for all or any portion of the concrete pavements which have been constructed by him, or under his authority.

The master has made his report. He states in it, that he directed the defendant to make out and produce before him "an account of all cement or concrete pavements or sidewalks made or laid by him since the 2d day of May, 1871, also the date when laid, the place where, the number of square feet, the price per foot and the total amount received;" that such accounts were produced and are submitted with the report; that "the defendant was also required to produce an account showing the cost or expense of laying such pavements and sidewalks, and the profits derived therefrom by the defendant;" that the defendant produced no detailed account showing such cost or expenses, but produced estimates of expenses, which are submitted with the report; "and that the cost or expense to the defendant of laying the cement pavements or sidewalks stated in his several accounts, is not exceeding 17 cents per square foot." The report states the defendant has laid, as appears from his accounts, 162,843½ square feet of sectional cement pavements, and received therefor the sum of \$38,380.70; that the cost of the same, at the rate of 17 cents per square foot, was \$27,683.39; that the sum of \$10,697.31 is "the profits made by the defendant in the laying of the sectional pavements laid by him," and "is the damage sustained by the complainant if all of the pavements referred to were laid in the manner or according to the process described in the complainant's patent, or are such pavements as are claimed in said patent." The report also shows, that some of the pavement so laid by the defendant was laid with tar paper or its equivalent between the joints; that some

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of it was laid by leaving metal plates in the joints and afterwards withdrawing said plates and pouring melted pitch into the open joints ; that some of it was made in the last named way, except that the joints were filled with cement ; that some of it was made with the use of joists removed before the joint was formed, nothing being left between the blocks but a trowel, or other instrument, or metal strips were used to make a joint, or a separation into blocks, during the process of laying the pavements ; and that some of it was laid by a method which this court has held, on attachment proceedings, to be an infringement.

The defendant has filed several exceptions to the report. The report states that the defendant's estimates of expenses are not accurate or reliable, but are greatly overstated as to quantity of materials used and the cost thereof ; and that such estimates charge too much per barrel for cement and for too much cement. Exceptions 1, 2, 3 and 4 cover the above matters and are disallowed. Exception 5 excepts to the finding that the cost or expense to the defendant of laying the cement pavements stated in his several accounts, is not exceeding 17 cents per square foot, and is disallowed. As to exception 6, I think the evidence shows that the sum of \$809, in respect of the pavements for Coburn and Birdsall, should have been deducted from the sum of \$5,637.74 mentioned in paragraph 4 of the report. Exceptions 7, 10, 13, 16 and 18 and part of exception 17 relate to the 17 cents per square foot, as cost, and are disposed of by the ruling as to exception 5, and are disallowed. Exceptions 8 and 9 proceed upon the ground that it does not infringe the plaintiff's patent to lay sectional cement pavements by leaving metal plates in the joints and afterwards withdrawing said plates and pouring melted pitch into the open joints, and are disallowed. Exceptions 11 and 12 proceed upon the ground that it does not infringe the plaintiff's patents to lay sectional cement pavements by leaving metal plates in the joints and afterwards withdrawing said plates and filling the joints with cement, and are disallowed. Exceptions 14 and 15 proceed upon the ground that it is not true that a trowel or other instrument or metal strips were used to make a joint, or a separation into blocks, dur-

ing the process of laying the pavement mentioned in the report as having been laid with the use of joists removed before the joint was formed, nothing being left between the blocks. I find the fact to be otherwise. There is nothing in the Russ patent or the Little patent like the method of procedure or pavement described in the part of the report to which exceptions 14 and 15 relate. They are disallowed. So much of exception 17 as relates to the sum of \$8,709.80 is disallowed.

Exception 19 excepts to the finding of \$10,697.31 as profits, and insists that the master should have found that the defendant made no profits in laying sectional cement pavements in the various ways set forth in the report. Exception 20 is to the effect, that the master "has found that the manufacturer's profits of the defendant in laying the several cement pavements which are set forth in the report, is the measure of damage sustained by the complainant by the alleged infringement of his patent, whereas the said master should have found that the manufacturer's profits is not the true measure of damages in such cases." Exception 22 is to the effect, that the master "has failed to report that the complainant has not proved the value of his invention and the license fees, if any, which he actually received for the use of the invention, and that, therefore, the complainant has not shown himself to be entitled to any but nominal damages for the use of his said invention by this defendant."

The decree directed the master to report the profits received by the defendant from the manufacture, use or sale of the patented improvement. It is those profits alone which the plaintiff can recover. He cannot recover anything more, as profits. He cannot recover the profits of the manufacture, sale or use of anything but the patented improvement. He cannot recover the profits of the manufacture, use or sale of anything found in the pavement, or of any part of the pavement, except the patented improvement. Whatever distinctive profit belongs to the use of "the arrangement of tar paper, or its equivalent, between adjoining blocks of concrete, substantially as and for the purpose set forth" in the patent, is the profit to be recovered. Such distinctive profit must be shown affirmatively by the plaintiff. If he fails to show it,

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he can recover nothing, as profits. The plaintiff has proved no license fee, as showing the value of the patented improvement. Nor has he otherwise shown the value of the patented improvement. No evidence on that subject was given before the master. The reference proceeded on the principle that all the value or usefulness there was in the pavements laid by the defendant was due to the permanent or temporary interposition in the joint, during the process of laying, of something external, to make a separation into blocks or sections. This was clearly a mistake. The plaintiff's invention contributed but a small part of the usefulness of the pavement. As a concrete pavement, with all the advantages due to the smoothness and durability of such a pavement, it was a valuable pavement, without being in blocks or sections made by the use of the patented improvement. The advantage of being in blocks made by the use of the patented improvement was an advantage which does not give to the plaintiff the right to recover the profits of laying the entire pavement. These principles are well settled. *Mowry v. Whitney*, 14 Wallace, 620, 649; *Philp v. Nock*, 17 Wallace, 460; *Goulds Mfg. Co. v. Cowing*, 12 Blatchf. C. C. R., 243; *Goulds Mfg. Co. v. Cowing*, 14 Id., 315; *Black v. Munson*, 14 Id., 265; *Buerk v. Imhaeuser*, 14 Id., 19; *Blake v. Robertson*, 4 Otto, 728; *Garretson v. Clark*, 15 Blatchf. C. C. R., 70. Exceptions 19, 20 and 22 are allowed, so far as they claim that the master should not have reported any sum as profits, under the interlocutory decree.

The master also reports, that "the complainant is entitled to recover from the defendant a further sum, as special damage, on account of the laying of the pavement for Andrew Dold, which pavement was laid in the same manner as the City Hall pavement, above referred to, the proofs showing that said pavement was contracted for and laid by the defendant in October, 1876, but is not included in any of the accounts rendered by him;" and that "it is shown that the complainant gave to Dold a bid or estimate for the said work, and that he was underbid by the defendant, and thus was damaged to the amount of \$900." Exception 21 excepts to the report, because it finds "that the complainant is entitled

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to recover from the defendant special damages on account of the laying of a pavement for Andrew Dold, and that the proofs show that said pavement was laid in the same manner as the City Hall pavement." So much of exception 21 as excepts to the report of the \$900 as special damage is allowed. Exception 22, before cited, is broad enough to be an exception to the report of the \$900 as damages. The remarks before made as to the allowance of profits apply to this \$900. If entitled, in any event, to any allowance of damages in respect of the Dold pavement, the plaintiff must show the value of the patented invention as distinct from the value of the rest of the Dold pavement, and can in no event recover as damages the entire \$900. The rest of exception 21 is disallowed.

An order will be entered disposing of the exceptions in accordance with this decision.

John Van Santvoord and Edward Fitch, for the complainant.

Arthur V. Briesen, for the defendant.

THOMAS M. MCGUIRE

vs.

HARVEY A. EAMES. IN EQUITY.*

A motion for a preliminary injunction to restrain the infringement of a patent was made six months after it was issued. The answer put in issue its validity, and set up a license to construct and use the machine complained of, granted by the plaintiff before the patent was issued. It was disputed, on affidavits, whether the defendant's machine was so made with the knowledge and consent of the plaintiff, and whether the invention was new, and the defendant was shown to be able to respond in damages: *Held*, that the motion must be denied.

(Before BENEDICT, J., Eastern District of New York, October, 1878.)

* 15 Blatchf. C. C. R., 312.

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BENEDICT, J.

This is a motion for a preliminary injunction, to restrain the defendant from using a certain hydraulic power accumulator, upon the ground that it is an infringement upon a patent issued to the plaintiff on the 23d day of April, 1878, and numbered 202,660. The answer filed to the bill puts in issue the validity of the plaintiff's patent, and further sets up a license to construct and use the machine in question, granted by the plaintiff prior to the issuing of the patent upon which he relies. It appears, from the affidavits, that the defendant does not construct machines for the purposes of sale, but did construct the machine complained of, which he is using in the manufacture of hats. The machine was constructed prior to the plaintiff's application for a patent, and from measurements taken for that purpose from the machine upon which the plaintiff thereafter applied for and obtained a patent. Whether the defendant's machine was so constructed with the knowledge and consent of the plaintiff, is a fact in dispute, there being two affidavits upon this subject, opposing each other. There are, also, affidavits going to show that the plaintiff's machine was not invented by him, but is similar to a machine in use at No. 13 Adams street, for some seven years before the plaintiff's machine was constructed, and one of these affidavits is that of the workman who constructed the plaintiff's machine, and who states that it is, in all essential particulars, like the machine in use at No. 13 Adams street, and was intended to be exactly similar, save only in regard to the position of the weights upon the piston, and that the difference in this respect is not only unimportant, but was suggested by the deponent, and was not the invention of the plaintiff. To this affidavit is opposed the affidavit of the plaintiff, who contradicts the statements of the workman, whom he shows to have been discharged from his employment, and to be hostile and biased. It is conceded that the defendant is able to respond to any claim of damages that is made by the plaintiff. Upon such affidavits as these, it is impossible to grant the plaintiff's application for a preliminary injunction. The patent is recent, its validity is disputed, and the facts upon which the plaintiff's right to an in-

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junction depend are not so clearly made out as to warrant the interposition of the court in this stage of the proceeding. The motion is denied.

James Ridgway, for the complainant.

William H. McDougall, for the defendant.

ALEXANDER HENRY

vs.

THE PROVIDENCE TOOL COMPANY. IN EQUITY.

The 25th section of the Patent Act of 1870, construed to mean that a patent granted in the United States will expire at the same time as the original term of a foreign patent for the same invention ; or, if there be more than one, at the same time as the one having the shortest term, without regard to any prolongation of such foreign patent which the patentee might procure from the foreign government.

Under the Act of 1870, a party who has taken out a patent in a foreign country may, at any time during the life of the foreign patent, apply for and receive a patent in this country, provided the invention shall not have been introduced into public use in this country for more than two years prior to the application.

The authorities upon the question of what constitutes public use, examined. Letters patent No. 119,846, granted to Alexander Henry, October 10th, 1871, for improvements in firearms, *held void*.

(Before CLIFFORD, J., District of Rhode Island, October, 1878)

CLIFFORD, J.

Vigilance is necessary to entitle an individual to the privileges which the act of Congress grants to an inventor. It is not enough that he should show his right by invention, but he must in due time secure it in the mode required by law. *Shaw v. Cooper*, 7 Pet., 319. Meritorious inventors cannot be debarred from receiving a patent for their inven-

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tions, by reason of the same having been first patented in a foreign country ; nor can the patent be held invalid on that account ; or be held void because the invention had been known or used in a foreign country before it was made here, if it had not been patented or described in some printed publication. Provision is also made that an invention first patented in a foreign country may be subsequently patented here, if the invention shall not have been introduced into public use here for more than two years prior to the application ; but the express enactment is that the domestic patent shall expire at the same time with the foreign patent, or, if there be more than one, at the same time with the one having the shortest term. 16 U. S. Stat. at Large, §§ 25-62, pp. 201, 208. Such was the language of the act under which the patent in controversy was issued, and the present act also provides, in the same words, that the domestic patent shall be so limited as to expire at the same time with the foreign patent ; or, if there be more than one, at the same time with the one having the shortest term. Rev. Stats., § 4,887.

Improvements in rifled fire-arms constitute the subject-matter of the patent described in the bill of complaint ; and the patentee states that the invention relates to the arrangement and construction of such fire-arms, and that the essential peculiarity of the improvement consists in the form of the rifled bore, which, as he states, includes a series of planes, angles and grooves, adding that these surfaces may be formed or arranged in various ways ; that, instead of relying wholly upon acute angles, semicircular or curvilinear projections or indentations, they may be produced upon the interior of the bore, and he gives examples illustrating some of the modes of construction. In one example of the improved bore, consisting of such a combination of planes and narrow curvilinear or angular surfaces or portions, he states that the surface of the bore, as made up of wide planes and narrow grooves, admits of a plug or missile of larger size than usual, and, of course, requires less expansion to fill the planes than one which touches the centres of the planes only ; and he adds, in this connection, what it is important to notice, that while it requires less expansion to fill the planes, there is

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less windage, and that the planes with the grooves have more power to insure the proper rotation of the missile or ball. Besides that, he also gives another example of the invention in which the planes and internal projections, either round, square or acute, are combined, so as to afford double the number of points of bearing for the missile when in the barrel, and less windage before starting it, and requiring less expansion of the same to fill up the planes, while there is an equal amount or more power to cause the missile to rotate.

Transverse sections of portions of the barrel of the fire-arm are given in the drawings, showing several modifications of the invention. In the modification shown in Figure 1, the barrel is rifled so that in its end view or transverse section it presents a quadrilateral figure with angular projections or bands extending inward from the angles of the planes, or, in other words, the rifling of the barrel forms four plane surfaces, and the periphery of the projectile, which is indicated by a dotted circle, touches the planes at the centres; and, in addition to the bearing-surfaces thus obtained, there are angular projections which extend inward from the planes, so that the apex of each of the projections is concentric with the centre of the surfaces of its contiguous planes. These four ridges thus afford a further bearing or support to the projectile, and by these means double the number of points of bearing are obtained. These angular ridges also fill up to a great extent the spaces between the angles of the planes and the periphery of the projectile, thus reducing the windage by lessening the amount of the expansion necessary to cause the projectile to fit the grooves of the barrel, so that the rotary or spiral motion of the projectile is obtained with greater certainty, and consequently its flight is rendered more accurate. Equally minute and satisfactory explanations of the other figures of the drawings are also given in the specification, which are omitted in the opinion for the sake of brevity. Appended to the specification is a single claim as follows: "What I claim is the system of rifling or grooving fire-arms in which a series of planes or flat surfaces are combined with angular, curved, or rectangular ridges or bands, either intervening between the planes or intersecting the

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same, as hereinbefore described and shown in the drawings."

These explanations are sufficient to show the nature of the invention which it is alleged the respondents have infringed. Service was made, and the corporation respondents appeared and filed an answer, setting up, among others, the following defences :

1. That the patentee is not the original and first inventor of the improvement.

2. That the patent is invalid, because it is not alleged therein that the invention had not been in public use or on sale in this country for more than two years prior to the application, the supposed invention having been first patented in a foreign country.

3. That the patent in suit, granted on the 10th of October, 1871, expired by operation of law on the 15th of November, 1874, when the foreign patent first obtained by the patentee expired by limitation of law.

4. That the alleged invention, or a substantial and material part thereof claimed as new, was, before the invention of the patentee, described in each of the several patents set forth in the answer.

5. That the alleged invention, or a substantial and material part thereof claimed as new, was, before the invention of the patentee, known to and used by the persons named in the answer and amended answer, and whose residences and the places where such prior knowledge and use were had are also specified and alleged in the answer and amended answer.

6. That the patentee first obtained a patent for the supposed invention in a foreign country, and that the invention had been introduced into public use in this country for more than two years prior to his application for the patent described in the bill of complaint.

Defences not urged at the argument will be omitted in this investigation.

7. They deny that they have made, used or vended the supposed invention of the complainant, or that they have rifled fire-arms, or that they have sold such as were rifled upon the system described in his patent, or that they have in any

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manner infringed upon his exclusive rights secured in the said patent.

Two of the defences, to wit, the third and sixth, will be first considered, for the reason that they were more discussed at the hearing than the others, and for the further reason that if one or both are sustained it will save the necessity of examining the others.

First. Of these, the first is that the patent, though not granted here until the 10th of October, 1871, expired on the 15th of November, 1874, when the foreign patent expired, which was previously granted to the same party for the same invention. Letters patent were granted to the complainant for the same invention by Great Britain, on the 15th of November, 1860, nearly eleven years before the patent granted to him here bears date. Complainant's patent in suit, which was issued here, was granted under the act of the 8th of July, 1870, the twenty-fifth section of which provides that such a patent shall expire at the same time with the foreign patent, or, if there be more than one, at the same time with the one having the shortest term. British patents at that period were granted for the term of fourteen years, and of course the foreign patent granted to the complainant expired at the time alleged in the answer. Grant that, and it follows that the patent here expired at the same time, unless the proposition of the complainant can be sustained that the language of the act of Congress, as copied from the twenty-fifth section of the act, includes not only the term of the foreign patent then in force, but also the term of any prolongation which the patentee might procure from the foreign government. 16 U. S. Stat. at Large, 201. Acts of Parliament at different periods have been passed empowering the Crown, by order in council, to prolong the term of a patent under certain restrictions, qualifications and conditions. By the act in force at the time in question, section 69 provides to the effect that if a patentee shall, before the expiration of his patent, petition Her Majesty, in council, setting forth that he has been unable to obtain a due remuneration for the expenses and labor in perfecting his invention, and that an exclusive right for the period of seven years will not suffice for that purpose, Her

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Majesty is authorized to refer the matter to the judicial committee of the privy council, and if the report of the committee is favorable "it shall be lawful for Her Majesty, if she shall so think fit, to grant an extension thereof for any term not exceeding fourteen years." Agnew's Treatise, chap. 8, p. 179. Henry, the patentee, made seasonable application to the Crown for the prolongation of his patent, stating, among other things, that recently a contract had been made by an American firm with the Turkish Government to supply six hundred thousand arms, to be made with the barrels rifled on his system, and that he would be unable to derive any benefit from the contract in the shape of royalties, unless the term of his patent was extended. Due report was made by the privy council November 11th, 1874, in favor of prolonging the patent for four years, upon certain restrictions and conditions, but the case shows that the report was not read at the board until thirteen days after the foreign patent expired, reckoning from its date. On that date it was read, and Her Majesty, in council, ordered "that the Lord Chancellor, upon the receipt thereof, do cause new letters patent, according to the tenor and effect of the order," to be made and sealed, and that a new patent be granted to the petitioner upon the conditions therein specified. New letters patent, it is provided by a later act of Parliament, shall be sealed and bear date as of the day after the expiration of the term of the original patent which may first expire. Agnew's Treatise, p. 179. Viewed in the light of these provisions, the complainant contends that, by the true construction of the act of Parliament, the prolongation of a patent is the same in effect as the extension of the original term, and that the extension, by relation, begins to operate at the moment when the original term expired, and the court is inclined to adopt that view as the correct exposition of the act of Parliament. *Saxby v. Hennett*, Law Rep., 8 Exch., 210.

Suppose that is so, still it does not touch the question in this case, the question here being—What is the true construction of the act of Congress under which the patent in suit was granted? When granted, the foreign patent was still in full force, and would not expire for the period of three years;

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nor could any one foreknow whether a petition for prolongation would ever be seasonably presented ; or, if presented, whether any prolongation would ever be granted. Congress employs the words "the foreign " patent, evidently referring to the term of the foreign patent to define the term of the domestic patent. Had Congress intended to grant a patent for an indefinite term, or for an uncertain and undefined duration, they would have employed suitable words to express such an intent. Our patent act requires every patentee, before he shall receive a patent, to file in the Patent Office a written description of his invention, and of the manner and process of making and using it, in such full, clear and exact terms as to enable any person skilled in the art to make and use the same.

Requirements of the kind are enacted for several important purposes : I. That the government may know what they have granted, and what will become public property when the term of the monopoly expires.

II. That licensed persons, desiring to practise the invention, may know during the term how to make, construct, and use the invention.

III. That other inventors may know what part of the field of invention is unoccupied. *Gill v. Wells*, 22 Wall., 27.

Adopt the theory of the complainant and none of these requirements would be of any avail, as none could foreknow whether the term of the patent was for three or for seven years, or for some intermediate term of duration, the effect of which would be to make the rights of property in this country depend upon the discretion exercised by a foreign sovereign. Support to that view is derived from the words of the section, which refer not only to the foreign patent, but, if there be more than one, to the one having the shortest term, which, in effect, excludes the theory that the provision in any view can be held to include any subsequent prolongation or extension of the monopoly beyond what was then vested in the foreign patentee. If Congress had intended otherwise the language would have been different, and words would have been employed to signify that the domestic patent should continue as long as the same invention was protected by the foreign government.

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Under the system prevailing here of extending patents for seven years, while the original term was for fourteen years only, the extended term would, in fact, have been a new grant, had not the eighteenth section of the same act provided that the extended patent should have the same effect, in law, as though it had been originally granted for the term of twenty-one years. 5 U. S. Stat. at Large, 125. Even admit that the prolongation of the term is, under the foreign system, a continuation of the original patent, and that it takes effect from the day the original patent expires, without any lapse whatever, still it is clear that the admission is of no weight in the present case, as the question to be decided here, is : What right does our patent act confer upon a patentee who first patented his invention in a foreign country? Her Majesty, as all must admit, had the power to refuse the petition for prolongation altogether, or to grant it, as she did in this case, upon terms and conditions not found in the original patent. Beyond all doubt she may grant the prolongation for the whole period recommended by the judicial committee, or for a less period of time, and no one in the case before the court could tell what her action in the premises would be until it took place, which was thirteen days after the term of the original patent expired. In fine, the Crown in such matters is supreme under the law of England, and is free to grant the royal favor in whole or in part, or to withhold it altogether. Extensions, when they were authorized here, were inchoate rights under the law, and were so far property that such a right could be sold and conveyed by an instrument of sufficient scope to show clearly that the grantor intended to convey the estate absolutely or upon condition. Assignments of the original patent might or might not convey the right to the extension, dependent upon the language of the instrument, and the intent, expressed or implied, of the parties.

Enough appears in these suggestions to show that there is a wide difference between the legal discretion which the Commissioner of Patents exercised under the act of Congress granting extensions, and the prerogative power exercised by the Crown in granting what is called prolongations of original patents.

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Applications of the kind here, if the statutory conditions were fulfilled, the Commissioner of Patents had no right to refuse ; but a patentee in the foreign country petitioning for a prolongation of the term, if he obtains his request at all, obtains it not as a legal right but as a royal favor, which of itself goes far to support the proposition of the respondents, that Congress never intended to extend the term of the domestic patent beyond the legal term secured to the foreign patentee when the domestic patent was granted. Great inconvenience would result from the opposite rule, as neither the authorities of the United States, nor inventors, nor the public would ever, in such a case, be able to know what the patentee acquired under a patent granted here, in a case where the invention had previously been patented in a foreign country. Neither the act of a foreign sovereign, nor the act of a foreign legislature, can have the effect to prolong the term of a patent granted here beyond the term which the act of Congress prescribes. Nothing short of a special act of Congress can breath new life into such a patent, after the term prescribed by law has expired. Tested by these several considerations, the court is of the opinion that the patent in suit ceased to be operative when the original foreign patent expired. Repugnant propositions are earnestly, and, no doubt, sincerely urged by the eminent counsel for the complainant, and, in view of the circumstances, the court deems it proper to say that there is another view of the case equally decisive against the right of the complainant to maintain the present suit

Second. That the supposed invention was first patented in a foreign country, and that the same had been introduced into public use in this country for more than two years prior to his application for the patent described in the bill of complaint. Inventions first patented in a foreign country may be patented here, "provided the same shall not have been introduced into public use in the United States for more than two years prior to the application." 16 U. S. Stat. at Large, 201. Evidence was given by the respondents showing that the invention was known and used in this country to a considerable extent for more than two years prior to the time when the complainant applied for a patent. Proofs to that

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effect come from several witnesses, of whom John Boyden was first examined. He testified to the effect that he made the acquaintance of the complainant while on a visit to Edinburgh, in Scotland, in the year 1853, and that he subsequently, at various times during several years, purchased of him shot-guns of his manufacture, which were sold by the witness in this country as he found customers ; that in the year 1863 the complainant sent to the witness a sporting rifle containing the patented system of rifling the bore, which, as the witness states, he sold to Nathan Washburn during that year. Three more rifles, containing the same improvement, were sent by the complainant during the succeeding year to the witness, two of which were kept until " some two or three years since," the other one having been returned the year following after it was received. Speaking of the rifle first received, which was sold to Washburn, the witness states that it " created something of a sensation," and that it was accompanied by a certificate of its performance. Newspaper descriptions of the same, it appears, had also been sent to the witness, giving accounts of the " performances of the rifles and their capacity." Washburn paid one hundred and seventy-five dollars for the rifle, which sum was transmitted to the complainant. He, the witness, also states that the first rifle was exhibited to a few persons before it was sold, and that the three rifles received the next year were sent to be sold if customers could be found ; that two of the number were used and exhibited at target practice, one of which was purchased by the owner of the one first sent, but was subsequently returned on account of a defect, and that the other was used by the witness. Both Washburn and the witness used these two rifles on different occasions in practising and at turkey-shoots, and the witness states that he used his rifle at the Adirondacks, shooting deer. Sufficient appears to show that the complainant desired the witness to act as his agent and make sales of the rifles sent, and the witness states that he paid over to the complainant the money received for the second rifle, and that he made efforts without success to sell the other two ; that he sent one to a firm of gun-dealers in New York for sale, but, being a muzzle-loader, it was not easy

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to sell that kind in competition with breech-loaders. He also states that three more military rifles were sent to him during those years as samples, with the purpose of obtaining an order for arms to supply a military organization, but that no order was received. Statements of a similar character are found in the deposition of Nathan Washburn, who was also called by the respondents. Among other things, he states that he first saw a rifle having its barrel rifled as described in the patent in 1863, at the office of the preceding witness, and that he became interested in the rifle from the targets exhibited, which it was said were made with it; that he purchased the rifle in 1863, as represented by the witness, to whom it had been sent for sale. Inquiries were then made of the witness as to the manner and extent the rifle had been used by him subsequent to that time. His answers were to the effect following: That he first went out with the rifle and tried it with a target, and that he found the shooting very satisfactory; that he then attended turkey-shoots, which he followed until they "barred him out" from shooting if he used the rifle with the rifled bore in question; that he made use of the first rifle for some two or three years at shooting-matches, and occasionally permitted others to use it; that he purchased a year later a more nicely finished rifle of the same construction, which proved defective, and he exchanged it for another with the preceding witness. Superadded to that, the witness states that he visited Edinburgh in 1865, and that while there he ordered of the complainant a rifle of the kind, without limit as to price; that in the course of six months a magnificently finished rifle came to hand, the cost of which in currency, at the then premium on gold, amounted to one thousand dollars; that he purchased the rifle for exhibition, but that he had tried its shooting capacity and pronounces it a "splendid shooting gun;" that he thinks he had fired the first rifle purchased fifteen hundred times; that Colonel Berdan called at his house several times to see the rifle, and spent most of two days in examining the rifle and its ammunition, and afterward constructed one and exhibited it at Long Island to a large number of persons; that he, the witness, fired the second one two or three times before "the accident" happened, and

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that he fired the substitute a great many times, but cannot tell how many. Two of the rifles which the witness purchased were exhibited in court for inspection, and the court is of the opinion that they contain the exact system of rifling described in the patent. Two or more witnesses were examined by the respondents to show that the patented system of rifling the bore of rifles was copied by the company which manufactured Sharp's rifle more than two years before the application for a patent here was filed in the Patent Office.

Suffice it to say, without reproducing the evidence, that it tends strongly to support the views of the respondents. Waiving that, the testimony of the other two witnesses, whose credit is above suspicion, is amply sufficient to show that the invention was very extensively known among our citizens; that it had been sold or offered for sale in repeated instances, and that it had been used in public many times and almost without number. Of these facts there is no doubt, and the only remaining question is as to their effect. Foreigners have never been permitted to take out a patent in this country, when their invention had first been patented abroad, without some restrictions beyond what was attached to our own inventors. No patent under the act of July 4th, 1836, for an invention previously patented in a foreign country was valid unless the patent granted here was applied for within six months after the publication of the foreign patent. 5 U. S. Stat. at Large, 121. Six months was the limitation in that act, but the subsequent act provided that a delay for that period should not debar the party from securing a patent here, provided the invention shall not have been introduced into public and common use in the United States prior to the application for such a patent. 5 Id., 354. Nothing is contained in the succeeding act touching the present question, except that the term of a patent is extended from fourteen to seventeen years. 12 Id., 246. Quite different regulations, and such as are more liberal to the foreign patentee, were enacted in the act under which the patent in controversy was granted. 16 Id., 201. Delay to apply for a patent here, however long, within the life-time of the foreign patent, will not debar the applicant in this country from receiving a patent, provided

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the invention shall not have been introduced into public use in the United States for more than two years prior to the application. Examined in the light of that provision, the only remaining question is whether the evidence exhibited by the respondents proves that the invention had been introduced into public use for more than two years prior to the time when the application for the patent in this case was filed.

Even meritorious inventions first patented in a foreign country could not be patented here under the act of July 4th, 1836, unless the application for the patent here was filed within six months after the publication of the foreign patent, and they were exposed to the danger of having their patents defeated under the act of March 3d, 1839, in case it could be shown that the invention had been introduced into public and common use for any time, however short, prior to the filing of the application. Defendants in a suit upon a patent granted here might, under the act of July 4th, 1836, plead the general issue, and give in evidence that the invention had been in public use or on sale, with the consent and allowance of the patentee, before his application for a patent, and, if they proved the allegation, they were entitled to judgment. 5 Id., 123. Cases arose under that provision in which it was held that proof of public use with the consent and allowance of the patentee, even for a day, was sufficient to sustain the defence. *Pennock v. Dialogue*, 2 Pet., 13; *Shaw v. Cooper*, 7 Id., 318; *Mellus v. Silsbee*, 4 Mason, 109. Hardships grew out of the stringency of that rule, and Congress enacted in the act of March 3d, 1839, that no such forfeiture should occur by reason of such purchase, sale or use, except on proof of abandonment, or that such purchase, sale or prior use had been for more than two years prior to such application for a patent. Expounding that provision, Justice Nelson said, "the patentee may forfeit his right to the invention if he constructs it and vends it to others to use, or if he uses it publicly himself in the ordinary way of a public use of a machine at any time prior to the period of two years before he makes his application for a patent." *Pitts v. Hall*, 2 Blatchf. C. C. R., 235. Other cases of repute decide in the same way, nor is the court aware that there is any conflicting

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decision. *McClurg v. Kingsland*, 1 How., 207 ; *M'Millan v. Barclay*, 5 Fish., 195 ; *Agawam Co. v. Jordan*, 7 Wall., 607 ; *Fruit Jar Co. v. Wright*, 4 Otto, 94. Justice Swayne says, in the latter case, that a single instance of sale or of use by the patentee may, under the circumstances, be fatal to the patent, and that such is the construction of the clause as given by authoritative adjudications. *Roemer v. Simon*, 5 Id., 219. Judicial decisions in England also decide that the phrase, public use, employed in patents granted there, means use in public or in a public manner, in opposition to a secret use, and that it does not mean use by the public generally. *Carpenter v. Smith*, 1 Web. Pat. Case, 534 ; *Hindmarch on Pat.*, pp. 108, 112 ; *Shad v. William*, 2 Web. Pat. Cases, 126. By public use, says Curtis, is meant use in public ; that is to say, if the inventor himself makes and sells the thing to be used by others, or it is made by one other person only, with his knowledge and without objection, before his application for a patent, *a fortiori*, if he suffers it to get into general use, it will have been in public use. *Curtis on Pat.*, § 382. Adjudications to that effect might be multiplied almost without number, but those already referred to are quite sufficient to show that by public use is meant use in public, as stated by all the well-considered authorities upon the subject. *Coffin v. Ogden*, 18 Wall., 124 ; *Reed v. Cutter*, 1 Story, 597 ; *Bedford v. Hunt*, 1 Mason, 305. Apply those rules to the case before the court, and it is clear that the sixth defence is well sustained, and that the respondents are entitled to a decree upon both grounds, which renders it unnecessary to examine the other questions raised by the pleadings.

Decree in favor of the respondent that the bill of complaint be dismissed with costs.

Chauncey Smith and *Charles S. Bradley*, for the complainant.

Benjamin F. Thurston and *J. C. B. Woods*, for the defendants.

LOUIS H. MAHN

vs.

HARRISON HARWOOD ET AL. IN EQUITY.

Where a patentee claimed : "The covering of a base-ball consisting of an outer and an inner covering, each of which is composed of two pieces of leather, and applied to the ball independently of each other, substantially as and for the purpose specified :"
Held, that although the patentee was the first to combine the double leather cover (which was well known on certain kinds of balls), and apply it to a ball of a harder kind equally well known, but which before had been used with a single leather cover or with none, the change would not constitute a patentable invention.

(Before CLIFFORD and LOWELL, JJ., District of Massachusetts, October, 1878.)

LOWELL, J.

This suit is brought for the infringement of James H. Osgood's patent, issued May 21st, 1872, No. 127,098, as reissued April 11th, 1876, reissue No. 7,046. The description is substantially similar in both patents, but the general statement of the invention in the opening, and the claims at the close are different. The invention relates to the coverings for base-balls and other similar articles, but the claims make no mention of other articles beside base-balls. The patentee describes coverings of leather cut in a hemispherical shape, and how they are to be fitted and sewed, with a peculiar stitch, which is the subject of claims not now in controversy. After one leather cover has been put on, and has become dry, another similar cover is fitted and sewed in like manner above the first. The third claim, which is alleged to be infringed, is : "The covering of a base-ball consisting of an outer and an inner covering, each of which is composed of two pieces of leather, and applied to the ball independently of each other, substantially as and for the purpose specified."

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By reference to the specification, the purpose of the second cover is to enable the ball to bear severe usage better than it could with a single cover. The defendant makes a ball with leather covers, each of which is composed of two pieces, and is, therefore, within the third claim, unless that claim shall be confined to the hemispherical form described in the patent. His ball has a certain amount of yarn wound round the inner cover or binder before the outer cover is put on.

In a suit by this complainant against another defendant in the third circuit, this form of ball was held to infringe the patent, and we see no reason to dissent from that decision. Our information concerning the decision above mentioned is derived from certain admissions and other oral testimony contained in this record, with copies of some of the depositions used in that case, from which it would appear that the novelty of the invention was decided on a very different state of facts from that which is before us.

It is proved in this record, and admitted in argument, that long before 1872, balls made of twine, wound on a core, with a single cover of leather, were old and well known; and that balls made in other modes, such as by winding yarn or twine round a bunch or bundle of scraps of cloth, or other similar substance, or by winding yarn loosely round a core of lead or a small bag of shot, were covered with two covers of leather in substantially the mode of the patent. It is admitted in this case, though it was not in the case in Pennsylvania, that this double cover was used by the defendant years before the date of the patent, and that this use was known to the patentee.

In this state of facts the plaintiff cannot hold a patent for a double covering for balls generally; and he contends that the term "base-balls," in his third claim, means only the balls used by a certain association of persons who regulate the games of the clubs, which are made of yarn, wound on a small core of cork or india-rubber to a certain size and of a given weight. These are much harder, and will bear, and are required to bear, much more severe usage than the balls used some years ago. The regulations were substantially what they now are, when the patent was issued. On the other

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hand, the defendant contends that the claim cannot be thus contracted, and that if it were, it is still void for want of novelty.

It is quite within the decisions, to construe a word in the patent, such as "base-ball," in a way to save the patent, if that is one of its meanings, though not the only or even the most common one; provided that, by such a construction, the patentee will receive exactly what he has invented, and every one else can use all that is old. We are, therefore, disposed to say that the third claim may be limited, and that upon this record it may be held that the patentee was the first to combine the double leather cover (which was well known on balls made of "gimpings," with yarn wound round them, and on other forms of ball), to a ball of a harder kind, equally well known, but which before had been used with single leather cover or with none.

But we are of opinion that such a combination is not patentable. It is not claimed in the patent, and does not appear to be true, that any new or different effect is sought or obtained, unless, perhaps, in degree, by the double cover as applied to the one ball rather than the other. A changed mode of playing the game required a harder ball, and one of well-known form was adopted, and to it was added the second cover, which was also well known, and often used in the softer balls. This is a change of form which appears, in view of the state of the art, to be within the line of ordinary mechanical adaptation, and nothing more.

Bill dismissed.

Joseph C. Fraley and P. J. Flatley, for the complainant.

J. E. Maynardier, for the defendants.

Bowker v. Dows.

HORACE L. BOWKER

vs.

GUSTAVUS D. DOWS. IN EQUITY.

Where a party sells an article to persons who intend to use it in the combination claimed in the patent, and it is advertised and sold for that very purpose, such sale is an infringement, although the manufacture and sale would not, *per se*, be an infringement.

A patent for a combination of saponine extracted from vegetable products with liquids containing carbonic acid gas is infringed by the sale of vegetable products containing saponine for use in such combination.

Letters patent No. 193,476, granted to Horace L. Bowker, July 24th, 1877, for an improvement in syrups and mineral waters, *held valid*.

(Before LOWELL, J., District of Massachusetts, October, 1878)

LOWELL, J.

The complainant, Horace L. Bowker, obtained a patent, No. 193,476, July 24th, 1877, for an improvement in syrups and mineral waters. The specification declares that the purpose of the invention is to create and sustain a sparkling, frothy foam or bead on any drink containing carbonic acid gas, when drunk from the bottle or fountain, and consists in combining with the syrups, mineral waters or drinks a small quantity of saponine extracts produced from any vegetable matters containing saponine, such as soap-bark, soapwort, and other plants which it mentions. It then describes the mode of obtaining the extract by steeping or boiling, and says that when the extract is mixed in small quantities with syrup, &c., it produces a foam and retains it a long time. He claims the combination of saponine, extracted from vegetable products, with syrups, mineral waters, ciders, beers, ales, etc., or other liquids containing carbonic acid gas, whether natural or artificial, as and for the purpose described.

The evidence for the complainant tends to show that the

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saponaceous extract has the properties ascribed to it, and that the complainant discovered this application of it. He makes an extract which he calls Bowker's gum, which has been sold to dealers in soda-water to a very considerable extent, and the defendant has sold an extract containing saponine for the same purpose and in large quantities. The directions for use, which are printed on the labels of the plaintiff's bottles, recommend the mixture of one or two ounces of the gum with every gallon of syrup, according to the amount of foam desired—for soda-fountains, one ounce ; for beer, one or two ounces for every six pounds of sugar ; for champagne cider, ten ounces of the gum to forty gallons of cider.

One objection taken by the defendant to the plaintiff's specification is that it does not describe the invention in such full, clear and exact terms as to enable a person skilled in the art to make and use it. No evidence has been taken by either party with a direct bearing upon this objection, which would be a formidable one if it appeared that the direction of the patent to mix a "small quantity" of the extract of saponine with the syrup or other liquid was one which required further experiment to enable the invention to be practised advantageously. Taking only such evidence as arises incidentally in the case, we are not prepared to say that the description is insufficient. It appears by the directions accompanying the bottle, which we have quoted, that the difference of an ounce or two in the quantity used is not considered material ; and we infer from this, and other testimony, that no great precision is required, and that a "small quantity" sufficiently describes the amount of the extract which is to be used in combination with the syrups and other liquids, in order to produce the desired effect ; that the amount may be varied within pretty wide limits without affecting the result, except in degree, and that this may be ascertained very readily without what can be called experiment.

The defendant denies both the novelty and the utility of the invention. His principal witness, an able working chemist, who prepares the extract sold by the defendant, testifies that he made and used the discovery many years ago, but abandoned it because he found saponine to be very poisonous.

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This witness is contradicted not only by other witnesses, but by a letter in which he said that his compound, made before the date of the patent, was composed of certain other substances, without any mention of saponine ; and on the other point, by the fact that he continued down to the time of the taking of his deposition, to sell a compound of saponine without any warning to his customers of its poisonous qualities, so that we think it would not be safe to decide, upon the strength of his evidence, that the invention was anticipated, or was not useful.

The defendant sells an extract containing saponine to persons who intend to use it in the combination claimed in the patent, and it is advertised and sold for that very purpose. Such a sale we regard as an infringement of the patent, though the manufacture and sale of the extract of saponine would not, without more, be an infringement. Where the patent was for a combination of the burner and chimney of a lamp, and the defendant made and sold the burner intending that it should be used with the chimney, he was held by Judge Woodruff to be liable as an infringer, *Wallace v. Holmes*, 9 Blatchf. C. C. R., 65. We do not think that the law requires us to hold those persons who actually use the combination (most of them, and perhaps all, without any purpose or knowledge of infringing), as the only persons liable, to the exoneration of the only person who makes and sells the extract for the express and avowed purpose of its use in the combination.

It has further been argued to us, with earnestness, that there is nothing patentable in the discovery that the foam in beverages can be increased by the use of saponine ; but we are of opinion that it is clearly a case of a patentable discovery of a new use, in a combination, to produce a better result than was known before.

Interlocutory decree for the complainant.

A. J. Robinson, for the complainant.

Dana B. Gore, for the defendant.

JOHN H. BLAISDELL

vs.

JAMES W. TUFTS. IN EQUITY.

Letters patent No. 40,811, granted to John H. Blaisdell, December 8th, 1863, for an improvement in soda water apparatus, in view of the state of the art, *held valid*.

(Before LOWELL, J., District of Massachusetts, October, 1878.)

LOWELL, J.

The complainant is the patentee, in patent No. 40,811, for an improvement in soda-water apparatus, granted December 8th, 1863. One part of the invention, relating to the supply of syrups, is not in issue. The second, divided into three claims, is for an arrangement for drawing the soda through two different deliveries with but one manipulation on the part of the operator. The inventor describes a compression-cock, working upon a washer and diaphragm, so that by turning the cock a short distance the soda-water is admitted into a small pipe, through which it is discharged into the tumbler with considerable velocity, in order to mix the syrup. By a further movement of the same cock the soda-water is permitted to enter a chamber surrounding the pipe, and through the chamber it flows down more slowly to fill the tumbler. The purpose of this construction is to dispense with the use of the condensing-bottle, and to save time, and thereby improve the beverage.

The claims said to be infringed are the first, third and fourth: "1. I claim, in a soda apparatus, the arrangement of one outlet for soda within another, substantially as described. 3. Also, the arrangement, in a soda apparatus, of a diaphragm, *n*, and disk *q*, or the equivalent thereto, so as to act under pressure, as described, to admit into two or more passages, and to shut off therefrom, the soda applied from a

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common source. 4. Also, the formation of a chamber in a soda-discharge pipe, so as to operate to check the velocity of the discharge under pressure, and thus supersede the employment of the condensing-bottle, substantially as set forth."

The defendant is licensed by Mr. Gee, whose patent is some months older than the complainant's, and during the long time that this case has been pending, he has made no draft tubes like the complainant's, as we understand. But he did make some such tubes several years ago, and has thereby infringed the patent to some extent.

The evidence shows clearly that the patentee was not the first to invent a mode of discharging soda-water which should avoid the necessity of using the condensing bottle. The Gee apparatus delivers two streams of soda, one small and rapid and the other large and slow, into the tumbler without the use of a condensing-bottle, and the defendant contends that it is a much better working device than that of the plaintiff. There is some reason to suppose that it has proved a better device, but it is specifically different, because it makes use of two cocks instead of one. The question in the case is: What, if anything, is left to the plaintiff in the light of the evidence in the record?

Construing Blaisdell's patent, as we try to do all patents, *ut res valeat*, we think it can be sustained upon a narrow construction, which will give him his exact improvement.

We think his chamber is a somewhat different contrivance from any pipe which was used before, and may properly enough be distinguished by the name "chamber"; and that it is so described as to distinguish it, by giving it an enlargement followed by a contraction.

It is true that in one passage of the specification it is spoken of as a "chamber or enlargement;" but taking into consideration the drawings, and the other part of the description, in which a collar or diaphragm is mentioned, we think we may say that a mere enlargement does not satisfy the patent, unless it should be clearly proved that it has all the useful effect of an enlargement followed by a contraction, which we do not think is proved. This sustains the fourth claim. The first and third claims may, we think, be sustained in like manner.

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ner, by confining them to the form of device which the plaintiff made—that is to say, the third as a diaphragm and disk, operating to admit the soda to two separate deliveries, and the first as being for a small outlet within a larger chamber, substantially as described.

The Gee apparatus, in the form in which Gee first tried it, but which he abandoned as being inferior to that which he patented, comes very near the plaintiff's invention ; but we think the chamber and valve both somewhat different, and doubt whether the whole tube would operate satisfactorily to effect the purpose described in the patent. It was used so short a time that it is not clear that it actually had the mode of operation, to a sufficiently practical purpose, to avoid the patent.

Interlocutory decree for the complainant.

Thomas W. Clarke, for the complainant.

George L. Roberts and *R. L. Roberts*, for the defendant.

THEODORE CLOUGH

vs.

THE GILBERT AND BARKER MANUFACTURING COMPANY
ET AL. IN EQUITY.

The first claim in the patent to Clough, June 14th, 1870, for improvement in gas burners, includes the combination of the perforated burner with surrounding tube, irrespective of any method of regulating the escape of gas from the perforations, and is found in the patent to J. F. Barker, July 26th, 1870, who is the prior inventor of the same.

The employment of a slit extending down to the base of the burner, instead of small perforations at the base: *Held*, to be an equivalent, the structure and mode of operation of the combination being the same.

A combination, such as was embraced in the second claim of Clough's

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patent, being found to be old in the art, the claim was limited in construction so as to include the particular devices shown, and when so limited, the defendant's device did not infringe.

(Before BLATCHFORD, J., Southern District of New York, October, 1878.)

BLATCHFORD, J.

This suit is founded on letters patent No. 104,271, granted to the plaintiff, June 14th, 1870, for an improvement in gas-burners. The specification says :

" My invention relates more particularly to burners for burning illuminating gas made by saturating gas with vapors of gasoline, commonly called air-gas. It has been found that common bat-wing or fish-tail burners are not adapted to burning this gas as ordinarily made, owing to the variable density of the gas coming from the generating apparatus.

" The object of my improvement is to adapt the slitted or bat-wing burner to the burning of air-gas.

" Said improvements consist, first, in perforating the base of the burner-tube with small holes or passages for gas to escape at the base of the burner, and surrounding the burner with a tube open at the top, but closed at the bottom, and united to the burner below the perforations in the burner-tube. It is more convenient to screw the tube to the burner, but it may be attached in any suitable manner. Second, in regulating the escape of the gas from the perforations at the base of the burner by a sliding tubular valve or cut-off, introduced into the burner-tube at the base and extending upward within it, the position of the tubular valve being regulated by a screw. These improvements, by furnishing a regulated supply of gas outside of the burner, but directed to the tip of the burner by the surrounding tube, give steadiness and increased illuminating power to the flame of the bat-wing burner, and make it a desirable burner for burning air-gas.

" The drawings represent a bat-wing burner as improved by me.

" Figure 1 represents an elevation of my improved burner attached to a short piece of gas-pipe ; Fig. 2, a view showing the surrounding tube in section and the burner therein ; Fig. 3, a vertical section through the burner and tube ; Fig. 4, a transverse section through the base of the burner-tube.

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" Letter *a* represents the burner-tip ; *b*, the burner-tube ; *c*, perforations at the base of burner-tube ; *d*, the surrounding tube screwed to base of burner-tube ; *e*, the tubular valve extending up in the burner-tube, and operated by an annular screw, *f*, attached to the lower end. Said annular screw, besides having a screw to work in the base of the burner, has an internal screw, by which it and the burner are attached to the gas-pipe, as clearly shown in Fig. 3 and the other drawings, the gasway being through the annular screw and tubular valve to the burner. As the burner is connected to the gas-pipe, *g*, by means of the annular screw, the adjustment of the gas escaping through the perforations of the burner-tube, is easily made by turning the burner upon the annular screw.

" I claim, as my invention and improvement in air-gas burners, the bat-wing burner perforated at the base, in combination with the surrounding tube, substantially as described. Also, in combination with the bat-wing burner perforated at the base and surrounding tube, the tubular valve for regulating the supply of external gas to the burner, substantially as described."

The defendants, in their answer, set up that they have not infringed the patent, and that it is void for want of novelty. At the request of both parties the court ordered a trial, at law, in this court, of two questions.

First. Whether or not the complainant is the first and original inventor of the improvement in gas-burners for which the first above-named patent has been granted to him.

Second. Whether or not the gas-burners manufactured by the defendants are substantially identical with those described in the complainant's patent and schedule thereto annexed, in their construction and mode of operation.

The issues were tried before Judge Shipman and a jury, and the jury answered both of the questions in the affirmative. Afterward, on a case made, the defendants moved before Judge Shipman for a new trial on the ground that the verdict was against the weight of the evidence. He denied the motion in a written opinion, in which he stated that the weight of the evidence on the question of infringement was not such as to justify him in granting a new trial, and that he was sat-

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isified with the conclusion of the jury on the question of priority. He afterward signed and filed a certificate, that, in his opinion, the verdict, on both questions, was sustained by the evidence given.

The burners made by the defendants were made in accordance with the description of the first form of burner described in the specification of letters patent granted to John F. Barker, one of the defendants, July 26th, 1870, for an improvement in gas-burners. The drawings of that patent consist of ten figures, which are thus referred to in the specification :

"Figure 1 is a side view of one modification of my invention. Fig. 2 is a side view of the shell. Fig. 3 is a side view of the burner. Fig. 4 is a vertical longitudinal section of the shell through line A B of Fig. 2. Fig. 5 is a vertical longitudinal section of the burner through line C D of Fig. 3. Fig. 6 is a side view of another modification of my invention. Fig. 7 is a side view of the shell. Fig. 8 is a side view of the burner. Fig. 9 is a vertical longitudinal section of the shell through line E F of Fig. 7 ; and Fig. 10 is a vertical section through line G H of Fig. 8."

The specification goes on to say : " My invention relates to a device for regulating the flow of carburetted air or gas from the burner to its point of combustion ; and it consists of a burner having a screw-thread made upon its lower part upon which is fitted, to turn freely thereon, a shell or tube, also having a screw-thread upon its interior lower part ; and the bore of said tube or shell is somewhat larger in diameter than the diameter of the upper part of the burner upon which it turns. A series of perforations is made in the lower part of the burner, so that, when the burner is made or set for the combustion of carburetted air or gas of any certain quality, the flame may be increased or diminished by turning the shell either up or down, as the case may be ; the shell, in its movements up or down, either closing or opening the holes or perforations, and letting out or stopping the flow of the gas through the said holes, as it is moved up or down. In the use of carburetted air for illuminating purposes it is almost always the case that, when the gasoline is first placed

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within the generator, it gives off a much greater amount of vapor, and the air, in passing through the generator, absorbs a greater amount of the carbon, and consequently becomes more thoroughly charged with, and is much richer in, the illuminating qualities of the gasoline than when the generator has been charged for a greater length of time; and, as a result, the carburetted air is sometimes too rich to make a desirable light, with the same amount passing out of the burner, and, at other times, as when the generator has been charged a longer time, the carburetted air flowing through the burner is deficient in illuminating power, and the light or flame produced is not uniform in its power or steadiness, and is sometimes liable to produce a smell of smoke, when too rich in carbon. My invention is designed to obviate all difficulty in this respect, as the burner is set, or made to let out at the tip the minimum quantity of gas that will produce a good flame, and, as the gasoline remains longer in the generator and becomes weaker in its illuminating qualities, the outer tube or shell may be turned so as let out more gas and increase the flame, without liability to smoke.

"That others skilled in the art may be enabled to make and use my invention, I will now proceed to describe its construction and mode of operation.

"In the drawing, L represents the main part of the burner, which is made similar to the common burner, except that the lower part has a screw-thread made upon the outside and inside. Figs. 1, 2, 3, 4, and 5 represent one modification, in which L is the burner, having the usual screw-thread made upon the lower interior part, by which to secure it to the pipe. At *a'* is a conical shoulder or seat upon the exterior (shown in Figs. 3 and 5), and a screw-thread, *d'*, made upon the exterior of the lower end, and the small holes *c* are made either at the seat *a'* or just below it. I is a shell or tube, the inside diameter of its upper part being somewhat greater than the outside diameter of the part L, and upon the interior of the tube at *a* is a conical-shaped seat, made to fit upon the exterior seat *a'* upon the burner L. A screw-thread, *d*, is made upon the interior of the lower part of the tube I, which fits the thread *d'* upon the exterior of the burner L.

" The operation of this modification is as follows : When the tube I is turned entirely on to the burner L, the inner seat, *a*, fits down upon the shoulder *a'* of the burner L, and the only place of egress for the gas is through the slot at the tip. When the gasoline is fresh or new this slot will be quite sufficient to supply the flame ; but, as the gasoline becomes more exhausted of carbon, the tube or shell I may be turned up a little, so that the seat *a* shall be raised slightly from the shoulder *a'*, and more or less of the gas will pass out through the holes *c*, and pass up between the tube I and the burner L as the tube I is turned up or down, and when the gas, which escapes through the holes *c* and passes up between the tube and burner, reaches the top, it unites with that passing out of the slot at the tip, increasing the volume and flame. In this device the gas, after passing out through the holes *c*, is prevented from passing down between the tube and burner by the screw-threads *d* and *d'* upon the inside of the tube and outside of the burner.

" In the modification shown in Figs. 6, 7, 8, 9, and 10 both the burner and the regulating-tube are similar to that already described, except that the thread *d'* upon the outside of the burner L is carried up higher and the holes *c* are made below the top of the outer thread but above the top of the inside thread. The thread upon the inside of the tube I is not so long as the outside thread upon the burner L, but is considerably less, so that when the tube I is turned entirely down on the burner the holes will be above the thread on the inside of the tube, and there is no inside seat in the tube I to operate upon a beveled or conical exterior shoulder upon the burner L, as in the other modification.

" The operation of this modification is as follows : If the flame be too weak, the tube I is turned down upon the burner L until the top of the inside thread of the tube begins to pass below the holes *c*, when the gas will escape and pass up between the tube and burner, and increase the flame as before. If it should be desirable to stop the escape of gas through the holes *c*, it is only necessary to turn up the tube upon the burner, and, when the thread inside the tube covers the holes *c*, then there will be no escape of gas.

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" It will be seen that the principles of the operation of both modifications are very much alike, and are intended to accomplish the same object, although the tube turns up in the first case to let out more gas, while it turns down in the second case, both being equivalent, however, in their operation, and accomplishing the same result.

" I am aware that gas-burners have been heretofore made to give an additional supply of gas to the flame, but in those that I have seen they consisted of more pieces, and were considerably more expensive to manufacture, and in their operation the burner revolved with the tube, thus causing the flame to revolve also. This is very objectionable, as it is often desirable to have the flame stand in one particular direction. In this device the flame does not turn in the least, while the whole burner may consist of only two pieces, and is cheaply made, and its operation and effect are perfect."

The claim of that patent is : " An improved gas-burner, consisting of the burner or pillar L, having holes *c c* therein, and provided with the movable or adjustable shell or tube I, all constructed and operating substantially as and for the purposes herein described and specified."

After such certificate was signed and filed by Judge Shipman, The Gilbert & Barker Manufacturing Company, defendants in this suit, brought a suit in equity in this court, as owners of the said patent granted to John F. Barker, for the infringement of the same against Clough, the plaintiff in this suit, alleging as the infringement the making and selling of burners constructed exactly like the two forms described in the patent to Barker. The only testimony taken directly in the present suit brought by Clough is that taken on the trial before the jury, and embodied in a case made, on which the motion for a new trial was made. It is stated in the brief in this case, on the part of the defendants, that this case is brought to a hearing on the proofs and the verdict on such jury-trial, and on the proofs taken in the suit against Clough, and that such latter proofs are, by stipulation, used on this hearing. I am not furnished with any such stipulation, but I assume that both parties understand that there is one, verbal or written.

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In the record in the suit brought against Clough I find the following entry :

" It is agreed by the counsel that upon the trial of this cause either party may read such parts of the testimony, as he wishes, given in the suit of Theodore Clough against The Gilbert & Barker Manufacturing Company, and contained in the printed case and exceptions in that suit, as evidence herein, subject to the same objections taken on the trial at law in that suit, and that, if the court will consent, the two causes may be tried together, when the case of Clough against the said company, or any motion for final decree therein, is reached and heard, This stipulation is without prejudice to the right of either party to take further testimony in this cause."

The stipulation contained in such entry is not a stipulation for the use, on this hearing, of any proofs taken in the suit brought against Clough, but I shall assume that all such proofs are to be regarded as used and read on this hearing, and, from the brief of the counsel for Clough in the two suits, I infer such to be his view.

The first claim of the Clough patent relates to the first of the two improvements set forth in the specification, and the second claim relates to the second of such improvements. The combination of the perforated burner with the surrounding tube, irrespective of any method of regulating the escape of the gas from the perforations, is the subject of the first improvement and of the first claim. The office of that combination is, as the specification states, to enable the surrounding tube to direct to the tip of the burner the gas which comes through the perforations, such tube being open at the top and closed at the bottom, and united to the burner below the perforations. The combination of the regulating-valve with the perforated burner and the surrounding tube is the subject of the second improvement and of the second claim. Moreover, if the means of regulation are to be regarded as entering as an element into the first claim, there is no difference between the two claims.

The two forms of burner, A and B, alleged to be infringements in this case, are both of them substantially like the first form of burner described in the patent to Barker. In

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both of them the outside tube turns up to let out more gas. It is very clear that each of these burners contains the combination claimed in the first claim of the Clough patent. It is a more serious question whether either of these two burners contains the combinations claimed in the second claim of the Clough patent. They have no sliding tubular valve or cut-off introduced into the burner-tube at the base, and extending upward within it. In them the tubular valve forms part of the surrounding tube. Such valve goes to or leaves its seat by screwing up or down the surrounding tube. The surrounding tube cannot be permanently attached to the burner, but must be capable of movement, as it carries the valve. In the arrangement shown in the Clough patent the surrounding tube may be permanently attached to the burner, because the tubular valve is not carried by the surrounding tube, but is a third and separate instrument carried by an adjustable cylinder inserted within the burner from below. Moreover, in the arrangement shown in the Clough patent the burner and surrounding tube revolve together in adjusting their position in reference to that of the tubular valve, so as to let on or turn off the supply of gas through the perforations in the base of the burner, and by the revolution of the burner the flame also revolves. In the burners A and B the revolution of the surrounding tube regulates the supply of gas through such perforations, and the burner never revolves, nor does the flame.

The combination covered by the first claim of the plaintiff's patent is, I think, found in the Horace R. Barker burners, the existence of which prior to the plaintiff's invention is satisfactorily proved. In those burners the burner was a bat-wing burner perforated at the base. The perforations did not consist of small holes, but the stem of the burner was slitted all the way down to the base, allowing the gas to escape through the whole length of the slit. There was a surrounding tube united to the burner below the lower end of the slit. The burner-stem had a cone near its top, and when the surrounding tube was screwed so as to be in a certain position with reference to such cone, the effect was to direct to the tip of the burner the supply of gas coming through the slit below,

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the surrounding tube being open at the top and closed at the bottom, and the flame was thickened and a ring of flame was formed. The structure and mode of operation of the combination were the same as those of the combination covered by the first claim of the plaintiff's patent. The fact that the perforations in the Horace R. Barker burner existed not only at the base, but were continued in the form of a slit all the way up, makes no difference. Nor does it make any difference that the Horace R. Barker burner had a cone near its top. The first claim of the plaintiff's patent is broad enough to cover the Horace R. Barker burner, and that claim must be held to be invalid for want of novelty.

In respect to the second claim of the plaintiff's patent, it is shown that in the Horace R. Barker burner, by the screwing down of the surrounding tube-socket it impinged against the cone near the top of the burner ; cut off the supply of gas which came through the slit below ; and that the raising of the tube, so that it did not bear against the cone, allowed a supply of gas to come from below. Thus there was regulation, and by a valve arrangement. In view of the existence of that burner, which contained the combination of a bat-wing burner, perforated at its base, with a surrounding tube in substance like that of the plaintiff's patent, and a tubular valve for regulating the supply of external gas to the burner, the construction of the second claim of the plaintiff's patent must be such as to limit that claim to the form of tubular valve which he describes, namely, one in the interior of the burner-tube, and not forming part of the surrounding tube. Under this construction, the second claim of the plaintiff's patent is not infringed by the burners A and B, nor by any burner constructed in accordance with any description of a burner in the John F. Barker patent.

I have come to the foregoing conclusions after a careful examination of all the evidence given in this suit, and in the suit brought against Clough, and of the exhibits introduced, and with reluctance, because of the issue of the jury-trial, and of the expressed views of the judge who presided at it. But, being satisfied that the law and the evidence require a

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decree contrary to the verdict on the jury-trial, I am authorized and bound to pronounce such decree.

The bill is dismissed, with costs.

George H. Yeaman, for the complainant.

William Stanley, for the defendants.

JOHN T. WILLIAMS ET AL.

vs.

THE EMPIRE TRANSPORTATION COMPANY ET AL. IN
EQUITY.

Where one of the defendants appeared, and pleaded certain facts, which, if true, would show that he had no interest in the subject matter of the suit, and a motion was made to strike out such plea, which motion was, by consent, treated as a demurrer: *Held*, that the plea should not be overruled, nor ordered to stand as an answer, but that the benefit of the plea should be saved to the defendant until the hearing, when it would be treated as the testimony in the case might warrant.

A foreign corporation transacting business in a state, and amenable to the process of the courts of such state, is "found" within the state, in the sense of the judiciary acts, and may be sued in the federal courts therein.

(Before NIXON, J., District of New Jersey, October, 1878.)

NIXON, J.

This is a motion to strike out a plea. The bill of complaint was filed for the infringement of certain letters patent, against The Empire Transportation Company, a corporation organized under the laws of the State of Pennsylvania, and doing business as such, among other places, at Jersey City and elsewhere within the State of New Jersey, and B. W. Hopper, the agent of the said company in this state.

The service of subpoena was made upon the defendant Hopper. No appearance has been entered for the defendant cor-

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poration ; but Hopper has appeared and pleaded that at the time of the commencement of this suit he was acting merely as station agent, at Newark, New Jersey, for The Empire Transportation Company, a corporation organized and operating under the laws of Pennsylvania ; that, as such agent, he had nothing whatever to do with the construction and operation of cars for transporting petroleum, nor with the running of the same within the district of New Jersey, nor in any other place ; his duty as agent being merely to keep the books of the company, to collect the amounts due for freights received and shipped, and to make returns for the same to the office of the company at Philadelphia, etc.

By the consent of the parties the motion to strike out the plea has been treated as a demurrer, under the rules. The facts stated are admitted to be true, and the question is whether they constitute a sufficient reason why the said Hopper should not have been included as a defendant in the suit. The plea, although not common, is one well known in equity practice. It is sometimes called a plea in abatement, and sometimes a plea in bar. A defendant is permitted to plead that he does not sustain the character which he is alleged to bear in the bill, or that he has no interest in the subject of the suit. Story Eq. Pl., §§ 732-734.

I am quite sure that the plea ought not to be overruled. The facts stated may be a defence. The only doubt I have is whether I should save to the defendant the benefit of the plea to the hearing, or order it to stand for an answer. But, upon the whole, I think the former course is the true one, because so far as it appears to the court it may prove to be a defence. Matters may be disclosed in the evidence which will establish or avoid it, and no course should be now taken that will preclude the consideration of the question hereafter. The plea is, therefore, saved to the hearing, and to be then treated as the testimony in the case shall warrant.

But I infer from the argument of the counsel, at the hearing, that this is not the question which, in fact, the parties are endeavoring to have decided. They are reaching after a different matter. They wish to ascertain whether, if the proceedings should be discontinued against the defendant Hopper, for the

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want of interest, the suit is still maintainable against The Empire Transportation Company, a foreign corporation, in view of the provisions of the eighty-eighth section of the "act concerning corporations," approved by the Legislature of the State of New Jersey, April 7th, 1875 (Rev. Stat., 193), and also of the first section of an act of the Congress of the United States, entitled "An act to determine the jurisdiction of circuit courts," etc., approved March 3d, 1875. 18 U. S. Stat. at Large, 470.

The state law referred to enacts that in all personal suits or actions hereafter brought in any court of this state against any foreign corporation not holding its charter under the laws of this state, process may be served upon any officer, director, agent, clerk or engineer of such corporation, either personally, or by leaving a copy at his dwelling-house, or usual place of abode, or by leaving a copy at the office, depot or usual place of business of such corporation.

The act of Congress provides that no civil suit shall be brought before either of said courts (circuit or district), against any person, by any original process or proceeding in any other district than that whereof he is an inhabitant, or in which he shall be found at the time of serving such process or commencing such proceeding, etc. The corporation was not an inhabitant of the State of New Jersey at the time of filing the bill and serving the subpœna.

It has long been settled that the body corporate only lives within the boundaries of the sovereignty by which it is created. *Bank of Augusta v. Earle*, 13 Pet., 519; *Railroad Company v. Wheeler*, 1 Black, 286. This results from the fact that it is an artificial being, deriving its life from its charter, and has no capacity to exist, and no power to exercise its functions, except as they are conferred by the local law.

It would seem to be a legitimate, if not a necessary inference from this, that a corporation could not be found outside of the place of its creation, to be served with legal process. Such was the opinion of the late learned justice of the second district (Nelson), in the case of *Day v. The India Rubber Company*, 1 Blatchf. C. C. R., 628, in which he quashed a writ of attachment and summons that had been issued in the cir-

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cuit court of the southern district of New York against a New Jersey corporation. And in the subsequent case of *Pomeroy v. The New York and New Haven Railroad Company*, 4 Blatchf., C. C. R., 120, he went a step further, and held that the defendant corporation, organized in Connecticut, could not be found in New York, in the sense of being amenable to federal process, although the legislature of the State of New York in authorizing the body corporate to purchase lands, to enter into contracts, and to extend its road into and over the state, had expressly provided that it should be liable to be sued by summons in the same manner as corporations created by the laws of the state, and that the process might be served on an officer or agent of the company. He says, p. 122 :

"The difficulty here is in giving effect to this law of New York, providing for service of process on the defendants. That is regulated, as to this court, by the act of Congress of 1789, already referred to, and cannot be altered or modified by any state law. According to that act, the defendant must be an inhabitant of the district, or be served with process within it, in order to give the court jurisdiction.

"Now, service of process, by the assent of this company, upon an agent, within the state, . . . cannot be said to be service upon an inhabitant of the district, or upon a person within it. The corporation is still a Connecticut company, resident within the State of Connecticut, but consenting to be sued in New York by service of process on its agent ; and, however effectual this service may be in conferring jurisdiction over the company, upon tribunals governed by the laws of New York, it cannot have that effect in respect to federal tribunals, which are not only not governed by the state laws, but are governed by the act of Congress, which has prescribed a different rule."

But the Supreme Court have given a different construction to the act, and, of course, have come to a different conclusion. Since the recent case of *ex parte Schollenberger* (not yet reported, but printed in the Albany Law Journal for the current year, p. 427), it would seem that the court should look to the legislation of the state, and exercise jurisdiction over a foreign corporation, when provision has been made for the

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service of process. That action was one of a large number instituted in the circuit court of the United States for the eastern district of Pennsylvania, by a citizen of that state against a foreign fire insurance company, which corporation had been allowed to transact its business in Pennsylvania by a law of the state, upon certain terms, one of which was that a person should be designated upon whom a service of summons could be made, in case of suit against them. The circuit court dismissed the case for want of jurisdiction, and because the law of the state could not confer it. But the Supreme Court, after long argument and careful consideration, issued a mandamus directing the circuit court to reinstate the suits and proceed to trial, holding that a foreign corporation, transacting business in Pennsylvania, in view of the legislation of the state, was *found* there for the purpose of service of the writ.

As the last utterance of the highest tribunal, this must now be accepted as the law, and it is instructive to review the steps by which the court reached the result.

In *The Bank of Augusta v. Earle*, *supra*, it was held that a corporation might be deemed to have an existence beyond the place of its creation, to the extent of making contracts which the courts would enforce.

In *The Lafayette Insurance Company v. French*, 18 How., 404, the question was whether the federal tribunals would acknowledge the validity of judgment obtained in the courts of a state against a foreign corporation, when the state law authorized the corporation to transact business within the state only on the condition that service of process upon the agent of the corporation should be considered as service upon the corporation itself.

The court held that the state had the right to impose such a condition in regard to suits before its own tribunals, and that when the corporation sent its agent into the state to effect insurances, it must be presumed to have assented to the rule.

In *The Railroad Company v. Harris*, 12 Wall., 65, a suit was brought in the Supreme Court of the District of Columbia against The Baltimore and Ohio Railroad Company for in-

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juries received from a collision on the road in the State of Virginia. The company received its charter from the State of Maryland. Authority was given by the legislature of Virginia to extend the road into that commonwealth, clothing the company with all the rights and privileges granted, and subjecting it to all the obligations and penalties imposed by the original Maryland charter. Congress subsequently passed an act authorizing the extension of a lateral road into the District of Columbia, and conferring upon the company the right to exercise the same powers and privileges, and imposing upon them the same restrictions in the construction of the said lateral road within the District as they might exercise or be subject to under and by virtue of the act of incorporation of the State of Maryland.

After argument and reargument the court held that no new corporations were created by this legislation in the State of Virginia or in the District ; that the old corporation remained unchanged in its unity, but with the sphere of its operations greatly enlarged ; and that although foreign, and incapable of migration from Maryland, it might, nevertheless, be *found* in the District of Columbia, exercising its authority upon such conditions as were prescribed by the act of Congress. " One of these conditions may be," says Mr. Justice Swayne, speaking for the whole court, " that it shall consent to be sued there. If it do business there it will be presumed to have assented and will be bound accordingly." This decision was referred to with approbation by the court in the subsequent case of *The Railroad Company v. Whitton*, 13 Wall., 284.

It will be observed from an inspection of these cases that it is nowhere asserted that jurisdiction can be conferred upon the federal courts by the legislation of the state. Indeed, such an inference is expressly repudiated in the Pennsylvania insurance cases (*ex parte Schollenberger, supra*), where the court says :

" States cannot by their legislation confer jurisdiction on the courts of the United States, neither can consent of parties give jurisdiction when the facts do not ; but both state legislation and consent of parties may bring about a state of

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facts which will authorize the courts of the United States to take cognizance of a case. *Ex parte McNiel*, 13 Wall., 236."*

It would, perhaps, more nearly accord with the principle announced in these insurance cases, to say that, by the legislation of a state, foreign corporations doing business in the state may be estopped from setting up in bar of a suit in the federal courts that they are not amenable to the jurisdiction.

But, whether this may be the meaning of the decision or not, I am constrained by the authority of these cases in the Supreme Court to hold that the jurisdiction of the court over the present suit is not to be defeated because the defendant corporation was organized under the laws of a sister state. It was transacting business here, and by the provisions of the local law (Rev. Stat., 1877, p. 193) it is subject to process by serving the same upon one of its agents, and has waived its right to question the legality of such a mode of service.

A. Q. Keasbey and Joseph C. Clayton, for the complainants.

George Harding, for the defendant Hopper.

CATHERINE JUDSON

vs.

E. P. BRADFORD ET AL.

Issues of fact in civil cases in the circuit courts may be tried and determined without a jury, whenever the parties or their attorneys of record file with the clerk a stipulation in writing, consenting to that mode of trial.

All matters of fact involved in the hearing of an application to reissue a patent, and in granting it, are conclusively settled by the decision of the Commissioner of Patents in granting the application.

A patent offered in evidence affords a *prima facie* presumption of its validity, but such presumption may be overcome by proof that the improvement was previously made and reduced to practice by another, in this

* 6 Otto, 377.

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country ; or that it had been previously known to and used by others here before it was invented by the plaintiff ; or that it had been patented or described in some printed publication prior to the supposed invention by the patentee.

Mere discovery of a patentable improvement does not constitute it the proper subject of a patent, unless it be embodied, if a machine, into working machinery, and adapted to practical use.

Evidence of mere prior knowledge, without use, is not sufficient to defeat a patent *prima facie* valid ; the invention must be shown to have been complete, and capable of working.

Requisites of notice of defences of prior patents or public use, stated.

Where the evidence with regard to license fee, showed only a single license : *held*, that, under the circumstances of this case, it could not be regarded as affording the only measure of compensation to which the plaintiff was entitled.

(Before CLIFFORD, J., District of Massachusetts, October, 1878.)

CLIFFORD, J.

Issues of fact in civil cases in the circuit court may be tried and determined without a jury, whenever the parties or their attorneys of record file with the clerk a stipulation in writing, consenting to that mode of trial. Pursuant to that regulation, the proofs in this case were taken in open court, and the cause was heard without the intervention of a jury. Reissued letters patent for an improvement in corset-springs are held by the plaintiff, and she charges in her writ and declaration that the defendants have infringed the exclusive right, which the patent secures to her as such patentee, of making, using and vending the patented improvement, and claims damages for the alleged injury.

Service was made, and the defendants appeared and filed an answer, setting up several defences to the effect following : First : They deny that the plaintiff, as such patentee, was the original and first inventor of the alleged improvement. Second. They deny that the alleged improvement is either new or useful. Third. They insist that the alleged improvement was known to, and had been used by, the several persons whose names and places of residence are set forth in their original answer. Fourth. They allege that the improvement described in the second claim of the plaintiff's pat-

ent is found in each of the three patents mentioned in their original answer, and which are set up in defence to the action. Fifth. They also deny that they have ever infringed the patented improvement of the plaintiff, but admit that they have made corset-clasps, having studs situated as described in said second claim of the patent in question, with the fastening-spring lying upon the busk when in use in the manner described in that claim. Sixth. Even if the patent is valid and the charge of infringement is proved, still the defendants insist that the plaintiff is not entitled to more than nominal damages.

Some of the defences are several times repeated ; but the whole substance of the defence is embraced in these several propositions. Defences of a like character are set up in the amendment to the answer, in which it is alleged that the supposed improvement is superseded by certain other patents therein described, and that it was known to many other persons therein named prior to the alleged invention made by the plaintiff. Leave to amend the answer was also filed by the defendants on the day of the hearing ; but the court, in view of all the circumstances, denies the application as not having been filed in season to justify its allowance. Patents, in certain cases, may be surrendered and reissued, but the reissued patent must be for the same as the original. Persons sued as infringers may set up the defence that the reissue is for a different invention from that described and secured in the original patent ; but all matters of fact involved in the hearing of an application to reissue a patent, and in granting it, are conclusively settled by the decision of the Commissioner in granting the application. Power to grant reissued patents, as well as originals, is vested in the Commissioner, and when that power has been lawfully exercised, and a patent has been duly granted, whether reissued or original, it is of itself, if introduced in evidence by a party claiming redress for an alleged infringement, *prima facie* evidence that the patentee is the original and first inventor of that which is therein described and secured to him as his invention. Redress for infringement is sought by the plaintiff in this case, and the reissued patent, having been intro-

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duced in evidence, affords a *prima facie* presumption of the validity of the patent described in the declaration. Grant that, and still that presumption may be overcome by proof that the improvement was previously made and reduced to practice by another in this country ; or that it had previously been known to and used by others here before it was invented by the plaintiff ; or that it had previously been patented or described in some printed publication prior to the supposed invention by the patentee. Questions of the kind usually make it necessary to examine the specification and drawings of the patent, in order to understand what its elements or ingredients are, and, in the case of a machine patent, to ascertain their mode of operation.

My invention, says the patentee, relates particularly to that portion of a corset known as the clasp or spring, and is intended to strengthen the clasp or busk, and especially at that portion of the same near the natural waist, where breakage is most liable to occur. Strength is imparted to the clasp or busk by means of an additional supporting steel or spring fixed immovably upon the wide steel or busk at two points, having its ends free, one above and the other below the waist, or centre of the busk. Improvements of the kind, the patentee admits have been patented, which include additional strengthening steels, unfastened or fastened at the centre to the main steel ; but she alleges to the effect that her improvement, which is fastened at the two points named, is better than those previously patented, because the steels between the points of fastening are kept stiff by the fastenings, and help to support each other, while, if they were merely fastened at the centre, the additional strength would only be that of an unaided steel, as weakened by the fastening process. Decided merit is also claimed for the patented improvement, because the studs, in order to strengthen the clasp, are placed near the edge of the busk which is farthest from the fastening-spring, which, it is said, is the reverse of the usual position, and brings the fastening-spring over the strengthening steel and over the centre of the busk. Combined as the three steels are under the described arrangement, it is clear that the clasp is much strengthened, and the patentee states that even

if the strengthening-steel be omitted, still the arrangement is better than those in prior use, as the fastening-steel, instead of lying upon the side of the busk, will lie upon its centre, inasmuch as the studs are upon the left instead of the right side. Minute description is then given of the several devices embodied in the patented improvement, and the function which each performs is clearly delineated by reference to the drawings, from which it is clearly shown that the clasp is strengthened in two ways, first, by the position of the fastening-spring hooking over to the farther side of the busk, and secondly, by the short steel spring placed near the centre of clasp-springs at the natural waist, where the springs are most liable to be bent and strained.

Special reference will only be made to the second claim, for the reason that the charge of infringement, as made in the argument, applies exclusively to that claim, which is for : " In a corset-clasp, a busk or spring, having its studs or fastening devices placed near the edge, farther from that side of said busk or spring over which the fastening-spring is brought to be attached to said busk or spring, thus causing the said fastening-spring to lie upon said busk or spring near its centre or farther edge, for the purpose set forth."

Beyond all question, the invention, as the patentee states, relates to that portion of the corset generally known as the clasp or springs, but the court is of the opinion that the invention in question, when viewed in connection with the descriptive portion of the specification, may be considered as a combination of old elements into an improved busk or clasp, provided with studs placed as described, and combined with the described overlying spring, the whole apparatus or contrivance constituting an improvement in corsets, as alleged in the introductory words of the specification.

Two narrow corset-springs were formerly used by manufacturers of the article—the fastening-spring having clasps to hold the corset together when closed around the waist of the wearer, the studs upon the busk being placed near the inner edge thereof, toward the fastening-spring, thus bringing the two springs adjacent to each other. Difficulties attended that mode of arranging the springs, as all the wit-

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nesses agree. Inconvenience resulted to the wearer, as it became necessary, in order to fasten the corset, to bring the two springs together, which frequently had the effect to pinch the under-garment and to cause the springs to break, rendering the corset valueless before it had been much worn. Efforts of various kinds were made to obviate these difficulties, but the efforts were not attended with much success prior to the patent in controversy. Plans of various sorts were devised, but the plaintiff, it appears, conceived the idea of placing the studs in a wide busk, on the farther edge thereof from the clasp or fastening, which brings the clasp, when fastened, in a central position over the busk, thus giving strength and stability to the corset-springs. Additional strength is also imparted to those springs by another device, described as a short steel, lying upon the centre of the busk, with two fastenings near the centre, and having its ends free; but it is not necessary to give that device much consideration, as it is conceded that it is not infringed.

I. Three patents are named in the original answer, as supporting the first defence. They are as follows: (1.) The Schneller patent, dated September 10, 1872. (2.) The Drew & Bayliss patent, dated September 9, 1853. (3.) The Roby patent, dated August 26, 1873.

Two of the claims of the patent first named are referred to as supporting the defence that the patent in controversy is not valid. Of these, the first is a claim for a corset-spring, composed of two blades of steel or other flexible and elastic material, one of the blades being made to cover the other, when the two parts of the corset-spring are connected by means of the described hooks, having rounded backs and curved on the inside, as set forth. Unlike the first, the other, which is the third claim of the patent, is for a corset-spring composed of three blades of elastic material, one blade forming the clasp and covering the other two blades when all are brought in position, said blades being so adapted as to be connected together by hooks having rounded backs as described. Prior explanations in respect to each of these claims are given in the specification. In respect to the first, the patentee states that the invention consists in a cor-

set-spring, composed of two blades of steel or other flexible and elastic material, so arranged that, when the parts of said spring are connected, one of said blades covers the other blade or blades, thereby increasing the strength and elasticity of the device, and preventing the same or any part thereof from turning edgewise, or from leaving an open space between the two ends of the corset ; the patentee adding that the blades are connected together by hooks having rounded backs, and that, being curved on the inside, they approach each other closely, as lateral strain is exerted.

Pertinent explanations are also made as to that part of the invention secured in the third claim, which are, that it consists in a clasp for a corset-spring composed of a single blade, in connection with two other blades made like ordinary corset-steels, both of them being provided with hooks to catch in holes in the covering-blade, the two described blades being covered by the one first mentioned, by which their strength and elasticity are increased, and they are effectually prevented from turning edgewise, or from leaving an open space between the ends of the corset.

Argument to show that the first patent introduced by the defendants is substantially different in its devices, combination of parts, and mode of operation, from the improvement patented to the plaintiff, is quite unnecessary, as the proposition becomes self-evident by a careful comparison of the two specifications. Enough has already been remarked to show that the findings of the court must be in favor of the plaintiff, unless the propositions of the defendants, made in defence, or some one of them, are sustained by the evidence they have introduced in their support, which makes it necessary to examine the second patent set up in the original answer, and to compare the devices described in the specification with those exhibited in the specification of the plaintiff's patent.

Improvements in stay and other like fastenings were patented to Drew & Bayliss prior to the invention of the plaintiff, but their invention related chiefly to the manufacture of stay-fastenings, the object of the inventors being to provide a simple construction of fastening which would admit of the stay being readily removed from the body of the wearer, and

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to that end they attached the busk of the stay to one edge thereof, and to the other edge they secured a thin strip of steel, caused to overlay the former by providing it with slots to receive studs projecting from the face of the busk. Means for disengaging the overlaying strip are also described, which is accomplished by bending the busk forward, the effect of which, as represented, is to bring the studs forward to the enlarged ends of the slots, and to disengage the overlying strip. Fastenings, as the patentees represent, may be constructed in the mode suggested, on the edges of the steel. Strips may be constructed so as to abut against each other, in which event the studs or hooks must project from the side of one steel strip so as to enter into the slots of the other.

Particular description is also given of the busk, the language of which it is unnecessary to reproduce, as the claim of the patentee is only for the construction of the fastening as described and shown in the drawings. Unlike as the improvement described in that specification and the patented improvement of the plaintiff are, the court is of the opinion that no remarks are necessary to show that the former has no tendency to show that the plaintiff is not the original and first inventor of the improvement described in her patent. About the same time improvements in fastening corsets by a mechanical busk were made by Louis Van Caneghem, for which he received letters patent prior in date to the invention of the plaintiff; but the invention is not of a character which requires any special description in this investigation, for the reason that the improvement is materially and substantially different from the invention in question between these parties. Other patents were introduced by the respondents for the same purpose, to which the same remarks apply, and for that reason they will not be separately considered.

II. Attack is also made upon the utility of the invention, but the proofs are so decisive upon that subject that it is unnecessary to discuss it, and the defense is accordingly overruled.

III. Prior knowledge and use constitute the substance of the third defence.

Thirty days' notice of certain defences must be given in writing, before trial, to the plaintiff, in order that evidence may be admitted under the general issue to prove the same, the object of the notice being that the plaintiff may not be surprised when the evidence is offered. Examples of the kind are the following: (1.) That the invention of the plaintiff had been patented or described in some printed publication prior to his supposed invention. (2.) That it had been in public use or on sale in this country for more than two years before his application for a patent.

When the notice is of a prior patent, the requirement is that the defendant shall give the name of the patentee, the date of the patent when granted, and the name and residence of the person alleged to have invented the same, the latter being necessary only when the patentee is not the inventor. Notice in like form is also required as to previous invention, knowledge or use of the thing patented and claimed by the plaintiff, and in that case the requirement is that the defendant shall state the names and places of residence of the persons alleged to have had the prior knowledge of the thing patented, and where and by whom it had been used. Rev. Stats. § 4920; *Teese v. Huntington*, 23 How. 10; *Phillips v. Page*, 24 Id. 168. Prior knowledge of the thing patented, and where and by whom it had been used, are required to be stated, which shows very clearly that in order to defeat the patent in suit by such a defence there must have been some use of the alleged prior invention. Mere discovery of a patentable improvement does not constitute it the proper subject of a patent unless it be embodied, if a machine, into working machinery, and adapted to practical use. Whoever first perfects a machine, and makes it capable of useful operation, is entitled to a patent. *Reed v. Cutter*, 1 Story, 594. Such were the views of Judge Story, and he held that the person is the first inventor, in the sense of the patent act, and entitled to a patent, who has first perfected and adapted the invention to use, and that until the invention is so perfected and adapted to use it is not patentable under the patent laws. *Washburn v. Gould*, 3 Story, 122; *Woodcock v. Parker*, 1 Gall., 437; *White v. Allen*, 2 Cliff. 230; *Seymour v. Osborne*,

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11 Wall. 552. Crude and imperfect experiments are not sufficient to confer a right to a patent, but, in order to constitute an invention, the party must have proceeded so far as to have reduced his conception to practice, and have embodied it in some distinct form. 11 Id. 552. All these cases show that evidence of mere knowledge without use is not sufficient to defeat a patent valid in form; but since the decision in the case of *Coffin v. Ogden*, 18 Wall. 120, it must be conceded that the evidence is sufficient to support the defence of prior knowledge and use, if it proves that the invention was complete and capable of working, if it had been put in use, and was known to any considerable number of persons.

Governed by these suggestions, the court will proceed to examine such portions of the evidence given in support of the third defence as seems to deserve special consideration. Evidence upon that subject was given by the defendants, but that most urged in support of the third defence is the testimony of David H. Fanning. He was examined, but the required notice that he would be called to prove prior knowledge and use, was not given in the answer. Of course his testimony is inadmissible to prove that defence, and the evidence was not admitted for any such purpose. But the court will not rest its decision entirely upon that ground, as it is clear that the evidence, if admissible, fails to prove the defence, even admitting that the exhibit is substantially the same as the improvement patented to the plaintiff. Take what he says to be true, and it only shows that he made the corset in March or April, 1875, without showing that it was ever put to practical use, and the witness states that he never made but one of the kind, and that it has remained in his office ever since.

Two well-founded objections to the reliability of the witness exist—viz: (1.) That the reasons given by the witness for recollecting the date are unsatisfactory and insufficient. (2.) That the testimony, if true, is not sufficient to establish the defence, as it fails to show that the exhibit was ever put in practical use, or that any one except the witness had the required knowledge of its existence.

Testimony was introduced as to the date of the plaintiff's

invention, from which it appears, to the entire satisfaction of the court, that it was made as early as the 21st of May, 1875—as appears by the positive testimony of the inventor and patentee

Other witnesses were examined by the defendants to prove the third defence, but it must be sufficient to say that none of their statements establish the proposition, and the defence in question is accordingly overruled. *Reed v. Cutter*, 1 Story, 596; *Whitely v. Swayne*, 7 Wall. 687; *Pennock v. Dialogue*, 2 Pet. 13; *Bedford v. Hunt*, 1 Mason, 304; *Union Sugar Refinery v. Matthiesson*, 3 Cliff. 662-4.

IV. Remarks already made are sufficient to dispose of the fourth defence, as they show that neither of the patents mentioned in the answer is of a character to supersede the plaintiff's patent.

V. Nor is much discussion of the fifth defence necessary, as the answer admits that the defendants have made, for a long time, and continue to make, a corset-clasp having its studs as described in the second claim of the plaintiff's alleged invention, and that the fastening-spring lies upon the busk when in use as set forth in said second claim.

Suffice it to say that the charge of infringement is fully proved as alleged in the declaration. Under the submission, it is claimed by both parties that the damages must be assessed by the court without the intervention of a jury. Where the suit is at law, the measure of damages is, that the verdict of the jury must be for the damages sustained by the plaintiff, subject to the right of the court to enter judgment thereon for any sum above the verdict, not exceeding three times that amount, together with costs. *Birdsall v. Coolidge*, 3 Otto, 69; 16 U. S. Stat. at Large, 207.

Frequent cases arise where proof of an established royalty furnishes a pretty safe guide for the instructions of the court, and the finding of the jury, but cases also arise where it cannot be applied without qualification, as where the patented improvement has been used only to a limited extent and for a very short period. Proof of a single license was given in this case, but it cannot, in view of the circumstances, be regarded as affording the only measure of compensation to

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which the plaintiff is entitled. Where there is proof of an established license fee, it may, in a case of protracted infringement, be regarded as a pretty safe guide ; but the proof in this case is not of that character, and, in such a case, general evidence may be resorted to as the basis of decision. *Suffolk Co. v. Hayden*, 3 Wall. 320.

Neither party having furnished any definite evidence as to the amount of the injury sustained by the plaintiff, the court is compelled to estimate the same from evidence introduced upon the subject. Weighed in review of the whole evidence, as the question must be, the court finds that the plaintiff is entitled to recover, as compensation for the injury occasioned by the infringement, the sum of three hundred dollars, with costs ; that the case is not one where punitive damages should be allowed, or judgment rendered for any sum above that allowed as actual damages.

Judgment for the plaintiff in the sum of three hundred dollars, with costs.

L. B. Thompson and *T. W. Clarke*, for the complainant.

J. L. Newton and *T. L. Livermore*, for the defendants.

CHARLES PARKER

vs.

CHARLES REMHOF. IN EQUITY.

The claim of letters patent No. 26,891, granted to George N. Cummings, January 24th, 1860, namely : " Forming a snap for metal boxes, such as spectacle cases, tobacco boxes, etc., by making corresponding indentations on the rim of the lid and on the side of the said boxes, in the manner and for the purpose set forth herein," held valid.

The defendant's fastening, which has a perforation into which a protuberance on the box snaps, thus fastening it, infringes the patent, as the sides of

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the perforation or hole in the rim of the defendant's box perform the same function as the sides of the indentation in the complainant's box, and there is no difference in principle or effect between the two fasteners.

(Before BENEDICT, J., Eastern District of New York, October, 1878.)

The patent upon which this suit was brought was granted to George N. Cummings, January 24th, 1860, and numbered 26,891, for an "improved catch for spectacle cases," the same being extended for seven years on January 20th, 1874. The invention consisted in producing two indentations with a proper tool, one in the forward part of the rim of the cover, and struck from the inside so as to produce a protuberance on the outer surface, and the other of like character, also from the inside upon the rim of the box part. The patentee claimed: "Forming a snap for metal boxes, such as spectacle cases, tobacco boxes etc., by making corresponding indentations on the rim of the lid and on the side of the said boxes, in the manner and for the purpose set forth herein."

BENEDICT, J.

This action is to recover damages, and for an injunction against the defendant, for an infringement of the letters patent owned by the plaintiff. The subject-matter of the invention is a method of fastening, for metal boxes.

The invention consists in producing two indentations, one in the forward part of the rim of the cover and struck from the inside so as to produce a protuberance on the outer surface of the rim, the other of like character, also from the inside upon the rim of the box part. These indentations are so placed that when the rim closes upon the box, the projection on the rim will snap over the projection on the box, and so form a fastening for the box. The defendant makes a metal box, and puts a hole in place of an indentation from the inside of the rim, producing a protuberance, into which hole a protuberance on the box snaps, and thus the box is fastened.

The difference between the plaintiff's and the defendant's device is, that in the defendant's fastening the sides of a hole perform the function which in the plaintiffs' fastening is performed by the sides of an indentation. The sides of the hole in the rim of the defendant's box perform the same function

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as that of the sides of the indentation in the plaintiff's box, and produce the same result. The plaintiff makes an indentation in the rim of his box to permit the protuberance on the body of the box to snap into it, and so fasten the box. The defendant, instead of making an indentation, cuts a hole which permits the protuberance to snap into it, and, by the action of the sides of the hole upon the sides of the protuberance, the box is fastened. There is no difference in principle or effect between the two fasteners, and in my opinion the charge of infringing is made out.

The defendant, as a further defence, denies the validity of the plaintiff's patent for want of novelty, and produces several witnesses and various boxes, for the purpose of showing that devices similar to the plaintiff's were in use prior to January, 1860, the date of plaintiff's patent. Here the burden is upon the defendant to establish the fact of prior use by satisfactory evidence. This has not been done.

Of the various boxes that have been produced, only two of them can make any claim to resemble the plaintiff's invention, and the testimony in respect to these two articles is too indefinite and uncertain to warrant the conclusion that they were in existence prior to the plaintiff's patent, in the face of evidence from several of the largest dealers in this sort of merchandise, that previous to the plaintiff's invention no boxes so fastened were known, and that when the plaintiff introduced his fastening the forms then in use were superseded and no longer salable.

The evidence, as it stands, has failed to convince me that any fastening similar to that of the plaintiff was in public use or on sale in this country prior to the invention of the plaintiff.

There must, therefore, be a decree in favor of the plaintiff.

B. E. Valentine, for the complainant.

Matthew Daley, for the defendant.

DAVID HASKELL ET AL.

vs.

THE SHOE MACHINERY MANUFACTURING COMPANY
ET AL. IN EQUITY.

Patents, in due form, when introduced in evidence in a suit for infringement, afford a *prima facie* presumption that the alleged inventor was the original and first inventor of what is therein described as his improvement.

The invention described in letters patent No. 29,785, granted to David Haskell, August 28th, 1860, for an improvement in sewing machines, which consisted in the combination of an isolated upright post and a notched movable plate, whereby flat and tubular work may be performed on the same machine : *Held*, to be the proper subject of a patent, and that the patent is valid.

(Before CLIFFORD, J., District of Massachusetts, October, 1878.)

CLIFFORD, J.

Patents, in due form, when introduced in evidence in a suit for infringement, afford the party seeking redress a *prima facie* presumption that the alleged inventor was the original and first inventor of what is therein described as his improvement. Redress is sought in this case by the complainants for the infringement of a patent granted to their assignor on the 28th of August, 1860, for an improvement in sewing-machines. When granted, the term of the patent was for fourteen years, but the patent was subsequently extended for the further term of seven years from the expiration of the original term. Without entering into details, suffice it to say the bill is in the usual form, charging infringement.

Service was made, and the respondents appeared and filed an answer. They admit that the patent was granted, and that the term was extended, but deny that the patentee was the original and first inventor, or that the improvement had

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not been known and used before the alleged invention by the complainants' assignor. Certain other defences are set up to the effect following: Both utility and patentability are denied, and they aver that the patent is in every respect invalid and void, and give notice that they will put three certain patents of prior date in evidence, in which a full description is given of the alleged improvement. Prior use of the improvement is alleged, and they give the name of Curtis Stoddard as the person who knew and used the improvement antecedent to the supposed invention by the assignor of the complainants. All these defences are formally set up in the answer, and they deny that they have ever constructed, used or vended the patented invention in violation of the rights of the complainants.

Proof to show the utility of the patented improvement is very abundant and conclusive. It shows that the advantage of the machine over other sewing machines is, that it combines an isolated work post with a detachable table, by which the same machine will answer both for the purpose of sewing manufactured articles of a tubular form, as well as flat pieces of work requiring larger supporting surface for the manipulation of the work. When sewing tubular articles of manufacture, such as boot-legs or other similar shaped articles, the isolated post is used without the detachable table, and both may be used together when sewing articles requiring the support of a larger surface. Beyond all question it has largely come into use, and the evidence proves to the satisfaction of the court, that it was the proper subject of a patent, and that it is highly useful in accomplishing the work for which it is designed. Machines of the kind, of course, have a frame, and the specification shows that the patentee has a bed or work-table which, instead of being made with an unbroken flat horizontal surface, as is generally the case, is made with an isolated upright post connected at the bottom, by a foot, with the main portion of the table, whose upper surface is of the same level as the top of the post.

Two explanations are made by the patentee which it is important to notice. (1.) That the post may be made as small as desired, in order that articles of thick, stiff material,

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whether large or small, may be placed upon it, in the manner illustrated by the piece of work represented in red outline in the drawings, with their edges lapping over it on either or all sides, and be turned round upon it in all directions. (2.) Suggestion is also made that the needle passes through a hole in or near the centre of the post, and that it may be used to perforate the fabric under operation, either by an upward or downward movement, but the patentee prefers the upward movement, which appears to be satisfactory.

Such a construction of the bed, with an isolated post, the patentee states, is specially adapted for shoemakers' use, and he alleges that it makes a machine capable of doing much of the work on boots and shoes which it has been difficult, and, in some cases, impossible, to do with the machines heretofore used. In order that the machine may be adapted to flat work, as well as that which is tubular in form, he provides a movable plate, in the form shown in the drawings, with a recess to fit around the post, with its opposite side straight to fit the open space, the same being formed with a bevelled end to fit and rest in a half-dovetailed recess and the shoulder provided for its support in the post. What he claims is the arrangement of the isolated upright post, with the notched movable plate, in the manner shown and described.

Viewed in the light of these suggestions, it is clear that the patentee does not claim either the post or the movable plate. Instead of that, the invention consists in the combined arrangement of those two devices in a sewing-machine in the described way, so that the machine may be usefully and successfully used in sewing tubular articles of manufacture, such as boot-legs or flat pieces of work which require a large supporting surface. Construed as the claim should be in connection with the descriptive portion of the specification which precedes, it is clear that the combination described is special, including not only the isolated post and the movable plate, but also the double arrangement by which the two described kinds of work may be successfully accomplished in the same machine. Examined in that light, the court is of the opinion that the machine is a highly useful one, and one that deserves to be favorably considered by the court.

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Attempt is made by the respondents to show that the assignor of the complainants was not the original and first inventor of the improvement. They make the allegation, and the burden is upon them to prove it, as the *prima facie* presumption is the other way. Three patents are referred to in the answer as showing prior invention, of which only two were introduced in evidence. Nor is it necessary to enter into any detailed exposition or explanation of the patents given in evidence, as it is clear that neither of them is of a character to support the issue tendered by the respondents, which is all that need be said upon the subject of those patents. Suppose that is so, still it is insisted by the respondents, that the thing patented was known and used by Curtis Stoddard prior to the alleged invention thereof by the assignor of the complainants. Evidence upon this issue was introduced by both parties, and the whole of it has been carefully examined, and the court will give conclusions formed from that examination.

1. Taken as a whole, the court is of the opinion that the invention of the assignor of the complainants was made as early as the 28th of February, 1860, as shown by evidence which leaves no doubt of its accuracy and truthfulness.

2. Sufficient appears to satisfy the court that the Stoddard machine, as originally constructed, was completed at a prior date, but that the machine, as constructed and organized at that date, was not of a character to supersede the complainants' patent, for the reason that the combination, construction, and mode of operation were substantially different. But the evidence is satisfactory that it was subsequently altered and made to conform to the machine which is the subject of the present controversy. Marked differences of statement exist among the witnesses in respect to that question, but the court is of the opinion, in view of the whole evidence, that the alteration was not completed until the 19th of May, 1860, and that the assignor of the complainants was and is the original and first inventor of the patented improvement.

Nothing remains except to determine the issue of infringement. Substantial aid in determining that question

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is derived from the stipulation of the parties, in which it is agreed that the respondents, prior to the filing of the bill of complaint, made or participated in making machines like Exhibit F, which was given in evidence at the hearing. Expert testimony upon that subject was introduced by complainants. They asked their principal expert to state whether, in his judgment, that exhibit does or does not contain the devices, arrangement, and combination of mechanism described in the complainants' patent, and he answered in the affirmative, and stated that it had an isolated work-post and a detachable work-plate in all respects similar to what is described in that patent, and that it is capable of performing the same functions, and is constructed in precisely the same manner. Decisive support of that view is derived from a comparison of the exhibit with the mechanism described in the patent, and is fully confirmed by the other evidence in the case.

Decree for complainants for an account, and for an injunction, with costs.

Edmund Burke and J. S. Abbott, for the complainants.

Smith & Bates and W. W. Swan, for the defendants.

SAMUEL E. THOMAS ET AL.

vs.

THE SHOE MACHINERY MANUFACTURING COMPANY
ET AL. IN EQUITY.

Reissued patents are presumed to be for the same invention as the original, and will only be adjudged void, because for a different invention, where it clearly appears that the reissue contains some new feature, of a material character, not described, suggested, or substantially indicated in the specification, drawings or Patent Office model of the original.

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The granting of a reissued patent closes all inquiry into the existence of inadvertence, accident or mistake.

Neither reissued nor extended patents can be attacked by an infringer in a suit against him for damages or profits, on the ground that the letters patent were procured by fraud in prosecuting the application for the same before the Commissioner.

Where the Commissioner accepts a surrender and grants a reissue, his decision is final and decisive, *in a suit for infringement*, unless it appears that he has exceeded his authority, and that there is such a repugnancy between the old and the new patent, that it must be held as a matter of construction that the new patent is not for the same invention as the original.

A patentee is not allowed to interpolate new features into a reissue which are not described, suggested or substantially indicated in the specification, drawings or Patent Office model of the original patent.

Where material interpolations are made in a reissue, they show that the Commissioner exceeded his jurisdiction, and in such case it clearly becomes the duty of the court to declare the reissued patent void.

Inventions secured by letters patent are presumed to be new and valid, until the contrary is shown.

(Before CLIFFORD, J., District of Massachusetts, October, 1878.)

CLIFFORD, J.

Reissued patents are presumed to be for the same invention as the original, and will only be adjudged to be void, because for a different invention, where it clearly appears that the reissue contains some new feature of a material character not described, suggested nor substantially indicated in the specification, drawings or Patent Office model.

Improvements in sewing-machines were made by Albert F. Johnson, for which letters patent were granted him in due form. Those improvements relate to an improved mechanism for the operation of the awl and needle in such a machine, and consist in the employment of a driving-shaft below the supporting-plate for the operation of the needle, and a shaft above the plate for the operation of the awl, the two shafts being connected by means of suitable intermediate mechanism. Rocking levers, it seems, were formerly used, and the patentee states that the shaft is much better than the old device, as the whole strain on the awl, when piercing the material, is conducted to the goose-neck of the machine, instead

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of the awl, which is sufficiently strong to prevent its breaking or bending when the awl enters the material. Experience showed that the specification was in some respects defective, in consequence of which the patent was surrendered and re-issued in the form described in the bill of complaint.

Service was made, and the respondents appeared and filed an answer setting up the defences following : (1.) That the original patent is still in force, and that one of the respondents is an owner of an undivided share of the original patent, and has the right and liberty of making, using and vending the invention. (2.) That the reissued patent is not for the same invention as the original patent. (3.) That the invention is not new or useful, nor has it been of any advantage to the complainants or the public. (4.) That the machine described in the reissued patent is not new, and had been previously described in the several patents mentioned in the second amendment to the answer. (5.) That they have not made, used or vended the invention described and secured in the reissued patent, nor in any way violated the rights of the complainants, or deprived them of any gains and profits.

I. Authority to accept the surrender of an original patent and to grant a reissue is conferred upon the Commissioner, and, in a case arising under the patent law then in force, the Supreme Court, more than thirty years ago, decided that where an act was to be done or a patent granted upon proofs to be had before a public officer upon which he was to decide, the fact that such officer had done the act or granted the patent was *prima facie* evidence that the proofs had been regularly made and that they were satisfactory, even though the patent did not contain any recitals that the prerequisites to the grant had been fulfilled ; and such continued to be the rule until the question came up under a later act, when the Supreme Court held that the granting of a reissued patent closed all inquiry into the existence of inadvertence, accident or mistake, and left open only the question of fraud for the jury. *Railroad v. Stimpson*, 14 Pet. 458 ; *Stimpson v. Railroad*, 4 How. 384. Since that time it has been definitely settled, that neither reissued nor extended patents can be abrogated by an infringer, in a suit against him for damages or profits,

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upon the ground that the letters patent were procured by fraud in prosecuting the application for the same before the Commissioner. *Rubber Co. v. Goodyear*, 9 Wall. 797. Where the Commissioner accepts a surrender of an original patent and grants a new patent, his decision in the premises, *in a suit for infringement*, is final and decisive, and is not re-examinable in such a suit in the circuit court, unless it is apparent upon the face of the patent that he has exceeded his authority, and that there is such a repugnancy between the old and the new patents, that it must be held as matter of legal construction that the new patent is not for the same invention as that embraced and secured in the original. *Seymour v. Osborne*, 11 Id. 543. Both the original and the reissued patents were granted in the name of the same patentee, and it is settled law that the suit in such a case must be brought in the name of the patentee or his assignee. *Goodyear v. Rubber Co.*, 2 Cliff. 369. Suppose the rule was otherwise, still it is clear, from the evidence in the case, that the legal title to the invention was in the patentee, both at the date of the original and of the reissued patent; but, in view of the circumstances, it is not deemed necessary to reproduce the details of the evidence.

II. Power to accept the surrender of an original patent and to grant a new one in its place is conferred upon the Commissioner, but the act of Congress giving that power expressly requires that the reissued patent must be for the same invention as the original. Patents may be surrendered to be corrected, and the power to surrender implies that the specification may be corrected to the extent necessary to cure the defects, and to supply the deficiencies, to render the patent operative and valid; but the patentee may not interpolate new features not described, suggested or substantially indicated either in the specification, drawings or Patent Office model. Interpolations of the kind, if material, show that the Commissioner exceeded his jurisdiction, and, where that is done, it clearly becomes the duty of the court to declare the patent void. Courts of justice will avoid such a conclusion, if they can reasonably do so by a proper application of the maxim that patents are to receive a liberal construction, and, if practicable, be so interpreted as to uphold and not destroy

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the right of the inventor. *Turrill v. Railroad*, 1 Wall. 491 ; *Ames v. Howard*, 1 Sum. 482 ; *Blanchard v. Sprague*, 3 Id. 279 ; *Glue Co. v. Upton*, 6 Off. Gaz., 837. Slight changes will not sustain such a defence, nor will the court in any case declare the patent void on that account, if, by the true construction of the two instruments, the invention secured by the two instruments is not substantially different from that embodied in the original patent. Inquiries in such a case are restricted to a comparison of the terms and import of the two patents in view of the drawings and Patent Office model. If from these it results that the invention claimed in the reissue is not substantially different from the one described, suggested or indicated in the specification or drawings of the original patent or Patent Office model, the reissued patent must be held valid, as all other alterations and amendments plainly fall within the intent and purpose of the provision in the act of Congress which allows a surrender and reissue ; or, in other words, if the reissued patent does not, upon the face of the instrument, embrace anything not substantially described, suggested or indicated in the specifications, drawings or model of the original, the defence that the reissued patent is not for the same invention as the original must be overruled. Apply that rule to the case under consideration, and the court is of the opinion that the second defence is not sustained. Alterations and new explanations are made in the specification, but they are not of a nature to change the character of the original invention when tested by that rule. On comparing the specification and drawings of the original patent with those of the reissued patent, it is found that the drawings are exactly the same, and the court is clearly of the opinion that there is no such change in the descriptive words of the specification as will support the second defence.

III. Inventions secured by letters patent are presumed to be new and useful until the contrary is shown, and, in the absence of countervailing proof, that *prima facie* presumption is sufficient to entitle the complainant to a decree in a suit for infringement. Proofs upon that subject were introduced on both sides, and the court is of the opinion that those in-

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troduced by the complainants fully sustain the affirmative of the issue.

IV. Before proceeding to the next defence, it becomes necessary to make some further reference to the patented specification, in order to understand what the difficulties were which the patentee had to encounter in his experiments. Machines for sewing waxed thread were in existence prior to the invention of the patentee, but most or all of them were only capable of using a single thread for the tambour stitch, it having been found impossible to form a seam by a double-thread or lock-stitch on heavy goods with a waxed or tarred thread.

Experience showed that the lock-stitch was the best, but it could not be made with a waxed thread in leather and other hard fabrics by the ordinary arrangement of devices found in machines then in use, for several reasons: First. Eye-pointed needles cannot conveniently be used on account of chafing the thread in the eye, as is more fully explained in the specification. Second. Because a waxed or tarred thread would stick in the longitudinal groove, and prevent the formation of a loop for the passage of a shuttle. Third. Because such a needle, in sewing thick goods, such as thorough-braces, would have to be so long that it would be inoperative.

Attempts, as the patentee states, have been made to obviate the difficulties in the use of the eye-pointed needle by employing an awl for puncturing the leather in combination with a hooked needle which pulls the thread down through the fabric; but these improvements will only produce a single-thread stitch, and that with difficulty, as it causes so much friction as to render it extremely difficult to use the shuttle.

Experiments were made to overcome those difficulties, and they showed that the following conditions in the machinery were desirable in order to produce a double or lock-stitch in leather or other fabrics that are to be united with a waxed thread:

One. That a substitute for an eye-pointed needle was required which would be free from the defects of the eye of the eye-pointed device.

Two. That a shuttle or other device for interlocking one

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thread with another should be so combined with the other devices as to pass through the loop of the needle-thread without strain or friction.

Three. That the tightening of the stitch should be performed, when the needle or other instrument is not in the goods, with the waxed thread.

Four. That the thread, while it is being passed down through the fabric, should be slack, or without being subject to tension, during the whole time of its being so passed.

Pursuant to these suggestions, the patentee, when making the lock-stitch, employs an open eyed hooked needle, combined with the shuttle shown in the drawings, and he also employs an apparatus called "take-up" in such a manner that while the thread is being conveyed through the fabric it is slack and subject to no tension. Detailed description is then given of every device in the sewing apparatus, and of the function which each performs, and of their mode of operation, but, in conclusion, the patentee states that the same result may be obtained by using the hook or crochet needle as the piercing instrument, and by binding the fabric by that or any other devices.

Six claims are appended to the descriptive portion of the specification, and the charge in the bill of complaint is that the respondents infringe the fifth and sixth, which are as follows: "5. In combination with a rocker-shaft above the work-plate, the awl-bar and thread-guide, as and for the purpose set forth. 6. A shaft arranged above the work-plate, for the operation of the awl in combination with a shaft below the table, for the operation of the needle, and suitable connecting mechanism, as and for the purpose set forth."

Six or more patents were introduced in evidence by the respondents as comprising the patented invention of the complainants. These were all carefully examined and described by the expert witness called and examined a second time. In conclusion, he states, in very explicit terms, that he does not find in any of those exhibits a rock-shaft located in the goose-neck of the machine for the operation of an awl and thread-guide, nor that any of them employ a shaft below the table

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for the operation of a needle, and a shaft above the table for the operation of an awl, and a connecting mechanism, which he regards as the essence of the fifth and sixth claims of the reissued patent described in the bill of complaint.

Expert witnesses were also examined by the respondents, whose testimony differs from that referred to ; but the court is of the opinion that the views expressed by the complainants' principal expert witness are correct, and that none of the patents in question are of a character to supersede the complainants' reissued patent.

V. Extended discussion of the question of infringement will be unnecessary, as the parties have agreed, in writing, that the respondents made, or participated in the making of, machines like the exhibit described in that specification. The court has already decided in the preceding case that such machines do infringe the mechanism described in the reissued specification. Nothing is exhibited in the present record to take the case out of the rule there laid down, and the court is of the opinion that the charge of infringement is fully proved.

Decree for complainants for an account and for an injunction, with costs.

Edmund Burke and *John S. Abbott*, for the complainants.

Smith & Bates and *W. W. Swan*, for the defendants.

MARY ANN SMITH

vs.

THE AMERICAN BRIDGE COMPANY. IN EQUITY.

It being old to cut dies in the face of a trip-hammer, or in the anvil upon which a trip-hammer works, so as to forge iron into different shapes, there was no invention in making dies in such hammers or anvils of the proper shape to form chord-bar heads for iron bridges.

Letters patent No. 101,529, issued to Frederick J. Smith, April 5th, 1870, for an improvement in dies for making chord-bar heads, *held void* for want of novelty.

(Before BLODGETT, J., Northern District of Illinois, October, 1878.)

BLODGETT, J.

This is a suit brought by the complainant to restrain the defendant from the use of a patent issued to Frederick J. Smith, April 5, 1870, for an improvement in dies for making chord-bar heads.

The chord-bar head is a bar used in the construction of iron bridges. The dies are simply recesses or slots cut in the head of a trip-hammer, or the anvil upon which the trip-hammer works, and by the working of the hammer the bar heads are brought into the desired shape from the joint effect of the dies and hammer blows.

It is simply a hammer with the pattern cut in the face of the hammer and the anvil, so as to fashion the iron to be manipulated under it into the desired shape. The shape required for these chord-bar heads is an oval, and it is contended or claimed by this patentee that he has made an improvement in chord-bar heads by this process.

There is this peculiarity about the specifications that strikes me as noticeable. The patentee starts out by stating that he has made an improvement in dies for the manufacture of chord-bar heads. He then describes the method by which he

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prepares the iron for making chord-bar heads, saying that he commences by shingling scrap iron together, reheating it, and rolling it into a solid bar, and bringing it into the outline of the shape finally wanted. Then he places it under the hammer into which these dies have been cut, and by blows of the hammer, when falling upon the anvil, he brings it into the proper form, and claims that he draws the fibre around the curved portion, so as to make the fibre surround the curved portion of the bar head, and thereby make it stronger. This is the claim which he puts in for making a better bar head, and one which will sustain more weight by many tons than those cut or chucked out in the ordinary way. The die, however, is all that he claims as the patented device, and the question naturally arises: How much of the patentee's improvement results from the better iron which he uses by shingling scrap iron together, and thereby obtaining a better material with which to make his bar heads, and how much is due to the process by which he manipulates the iron in his dies after he has shingled the bars together?

Every person familiar with the making of iron knows that scrap iron, when shingled and reheated and welded together, makes the toughest iron that is known to the trade, and that it is the process by which the best iron is prepared for the extraordinary services to which it is subjected for many purposes—such, for instance, as railroad car axles, where the very best quality of iron is required. But the feature of this invention which struck me when the case was first presented was, that these dies are old; they have been in use many years, as the proof in this case shows—many years before this man obtained his patent, or claims that he made his invention—for as the proof in this case shows, for twenty years before this man appeared upon the field as an inventor of this device, dies similar to this, except in shape, were used in Colt's armory at Hartford, Conn., for the purpose of shaping the butts of pistols under the trip-hammer, the die being partly in the anvil and partly in the hammer which fell upon the anvil. So, too, the hammers for pistols were struck under a die in a similar manner; and for many years prior to this inventor's entering the field, dies were used in a man-

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ufactory at Cleveland, for striking into shape irons, in form similar to this, used in making draw-bar heads for railroad cars.

Now, after the art of cutting dies in the face of the hammer and in the face of the anvil, so that articles could be shaped to a given pattern under the trip-hammer, had been so far developed that an ordinary mechanic could, with dies in an anvil and hammer, or in either the anvil or hammer, produce shapes like those draw-bar heads, what possible invention was there in cutting dies of another pattern in your anvil or hammer so as to shape these chord-bar heads? It was simply changing the form of the die.

A die which would work, or a hammer and anvil which would work a piece of iron into a draw-bar head, would work one into a chord-bar head when you simply changed the form of the die. It seems to me that it is preposterous to hold that a man is entitled to a patent for a mere device of this kind. It is not an invention of a new die, to change the form of a die so as to make a new shaped article under it. The time may come when it will be desirable to make a chord-bar head of different shape from the one which this die makes, and if the principle contended for by this patentee is sound, we should have a new patent for every conceivable new form of die, not only in chord-bar heads, but for every other form into which iron can be worked by the aid of dies. There is certainly nothing new in this device; there is no novelty in the mere change of form of the die, so as to change the form of that which is manipulated under the die.

The bill will be dismissed.

Banning & Banning, for the complainant.

Lawrence, Campbell & Lawrence, for the defendant.

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LEOPOLD COHN

vs.

THE NATIONAL RUBBER COMPANY. IN EQUITY.

Persons duly licensed by the owner of a patent may make, use and vend the patented product within the terms and conditions of their license without hindrance or interruption by the patentee, if they themselves comply with the terms and conditions of the license.

Licensees will not be permitted to put an end to the contract, or deny the validity of the patent, repudiate the title of their licensor, refuse to pay the stipulated royalty, and, when the validity of the patent is sustained, in spite of their hostilities, set up, as a defence to the charge of infringement, the prior license which they had wrongfully repudiated, and the terms and conditions of which they had refused to acknowledge and perform, upon the ground that the patent was inoperative, invalid and void.

Where the licensees repudiate the license, they may be treated by the owner of the patent, at his election, as infringers. He may have his remedy by suit upon the license, or he may treat the licensees in future as infringers of his exclusive rights under the patent.

(Before CLIFFORD, J., District of Rhode Island, October, 1878.)

CLIFFORD, J.

Inventors whose inventions are secured by valid letters patent have the exclusive right, for the period allowed by law, to make, use and vend the thing patented, and by virtue of that right they may assign the patent, or license others to practise the invention. Persons duly licensed by the owner of the patent may make, use and vend the patented product, within the terms and conditions of their license, without hindrance or interruption by the patentee, if they themselves comply with those terms and conditions ; but they cannot be permitted to put an end to the contract, or deny the validity of the patent, repudiate the title of their licensor, refuse to pay the stipulated royalty, and, when the validity of the patent

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is sustained in spite of their hostility to the rights of the owner, set up successfully, as a defense to the charge of infringement, the prior license which they had wrongfully repudiated, and whose terms and conditions they had refused to acknowledge and perform, upon the ground that the patent was inoperative, invalid and void. *Moody v. Taber*, 1 Holmes, 327; *Brooks v. Stolley*, 3 McLean, 523; *Neilson v. Fothergill*, 1 Webster Pat. Cas., 287.

Sufficient appears to show that letters patent, in due form, for a new and useful improvement in shoes, were granted to the complainant's assignor, and that the complainant, by certain mesne conveyances, acquired the title to, and became the owner of the same; that the original patent was duly surrendered and reissued to the complainant, and that the latter patent is in full force. Alleged improvements in shoes are quite too numerous to justify any attempt to describe such as preceded the one patented, nor does the patentee profess to do more than to describe his own improvement, as set forth in his specification. According to his description of the same, it consists in a shoe in which that part of the upper required to be spread open or turned down, to permit the insertion or extrication of the foot, is so constructed that the vamp, or front part thereof, shall overlap or overlay the quarter or rear portion of the same, and shall be connected together round about said quarter by the described fastener; that the vamp and quarters, or front and rear portions of the upper, are united by a seam extending from the sole of the shoe, at a point near the front of the heel, upward some distance, and from the point at which the vamp and quarters cease to be united, to the top of the upper. These parts overlies each other, the vamp, or front portion, being outside of, or on top of, the quarter, or rear portion of the shoe, which overlapped portions are durably united by a rivet at the proper point on each side of the shoe, so as to permit the insertion of the foot, and insure, at the same time, a proper retention of the shoe on the foot. Superadded to that is the statement that it has been found expedient to locate the points down to which the upper parts of the shoe can be opened out or turned over in a line or plane, passing

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through the point of the heel and the curve of the instep, as shown in the drawings, which also show a loop for pulling on the shoe, and a strap or buckle for fitting the same around the ankle. Representation is also made in the specification that the forward underlying edges of the quarters extend upward vertically from the point where the vamp and quarters are separable, while the back edges of the overlapping front part, or vamp, incline rearward as they ascend, or extend obliquely upward, making the lap greatest at the upper part or top of the shoe, leaving the overlapping portion of the vamp to draw well down around the ankle.

Service was made, and the corporation respondents appeared and filed an answer, setting up certain defences to the effect following: (1.) They admit that the original and re-issued patents were issued, and that the complainant became the owner of the invention. (2.) They admit the license, and that they are largely engaged in the manufacture and sale of rubber goods of all kinds, including four different kinds of rubber and cloth overshoes, designated by the names set forth in the answer. (3.) They allege that they were the first to introduce rubber and cloth overshoes into public use, having the peculiarity of construction which resides in connecting the vamp with the hind quarter by a folding flap, which dispenses with an open seam and allows the foot to be easily inserted in the shoe, so as to prevent the admission of snow or water when the shoe is on the foot, and buckled. (4.) That the manufacture of shoes containing that peculiarity is secured to the several persons named in the answer by the letters patent therein described, under all of which patents they hold the exclusive license. (5.) They admit that they procured the license of the complainant, denominated "Exhibit A," and contend that they still have the right under it to practice the invention upon paying the stipulated royalty. (6.) That the complainant licensed the company named in the answer to practice the invention in violation of the license and agreement they made with the respondents. (7.) That the shoes they manufacture, called in the answer Monitor shoes, do not contain or embody the invention described in the reissued patent. (8.) They deny that they have ever,

since the date of the agreement referred to, manufactured or sold any shoes which contain or embody the patented invention, but allege that, if they have, they are ready and willing and offer to pay the stipulated royalty.

Questions admitted need not be discussed, which is all that need be said in respect to the reissue and ownership of the patent. Nor is there any substantial controversy in respect to the nature and character of the patented improvement. Beyond all doubt it consists of an improved shoe, in which the front or vamp overlaps the quarter or back portion of the upper on both sides, and has the overlapping portions of the vamp connected together around the quarter by a strap, buckle or thong, extending from one portion of the vamp, around the heel or ankle, to the vamp on the other side, thus fastening the two overlapping sides of the vamp securely together. Both sides admit the utility of the invention, and, inasmuch as the answer of the respondents does not deny that the complainant is the original and first inventor of the improvement, the *prima facie* presumption in that regard is sufficient to entitle the complainant to a decree, unless the respondents have established some one or more of the defences set up in the answer. They admit that they procured a license of the complainant, as alleged in the bill of complaint, and the proofs show beyond all doubt that they have since repudiated it, and refused to comply with its terms and conditions. Licensees, if they fulfil the stipulations of their licenses, are entitled to practise the invention, within the terms and conditions of the instrument, to the extent of the authority conferred, without question or impediment by the owner of the patent. Doubt upon that subject cannot be entertained; but if they refuse to perform on their part, and repudiate the license, they may be treated by the owner of the patent, at his election, as infringers. He may have his remedy by suit upon the license, in case they have repudiated the license, or he may elect to treat them in future as infringers of his exclusive rights under the patent. Being infringers, they cannot set up the license in defence of a suit, any more than if they had never possessed any such authority. Curtis on Patents, section 217; *Brooks v. Stolley*, 3 McLean, 528; *Wood-*

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worth v. Weed, 1 Blatchf. C. C. R., 166 ; *Woodworth v. Cook*, 2 Blatchf. C. C. R., 151 ; *Crossley v. Dixon*, 10 H. of L. Cas. 304 ; *Lawes v. Purser*, 38 Eng. L. & Eq. 50 ; *Cutler v. Bower*, 11 Q. B. n. s. 986 ; *Kinsman v. Parkhurst*, 18 How. 293. Viewed in the light of the preceding authorities it is undoubted law, that the patentee may treat the license which he gave to the respondents as forfeited, and may proceed against the persons who held the license as infringers, just as if they never had any such license. Persons who had a license, and have repudiated it, stand in no better condition than persons who never had any such authority ; nor will a license, after it has been repudiated by the holder, avail him to any extent as a defence in a suit for infringement.

Tested by these suggestions, it is clear that nothing remains to be considered, except the question of infringement. Much discussion of that question is quite unnecessary, as it is obvious, from comparison of the alleged infringing exhibit with the exhibit of the complainant, that the charge of infringement is fully sustained. Attempt is made in argument to show that the shoe manufactured by the respondents, called the Monitor shoe, does not infringe the patented improvement, but the court is entirely of a different opinion. Suffice it to say, without entering more into details, that the complainant is entitled to relief as prayed in the bill of complaint.

Decree in favor of complainant for an account, and for an injunction.

Charles B. Stoughton, for the complainant.

Benjamin F. Thurston, for the defendants.

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ALONZO S. GEAR

vs.

JONAS FITCH.

SAME

vs.

DEFENDANTS IN TEN OTHER SUITS. IN EQUITY.

Where the complainant derives his title from an administrator: *Held*, that such title was proved by evidence of the signature of the administrator, and of the fact that the consideration for the assignment was paid to him, and by copies from the records of the probate court showing that such assignor was in fact the administrator of the deceased owner of the patent.

In equity, the bankruptcy of the complainant and appointment of an assignee, pending a suit on a patent, would not abate the suit, but would only necessitate the filing of a supplemental bill making the assignee a party; and the reconveyance of the patent to the complainant, pending the suit, would render such a proceeding unnecessary.

There is no law which requires an assignment of a right of action under a patent to be recorded in the Patent Office.

In assigning a right in action after the suit has been commenced, the person to be notified is he against whom the action is pending, so that he may not pay the wrong person.

The answer did not explicitly deny infringement, and a witness was produced who saw one or more infringing machines in the defendants' possession, although not in actual use: *Held*, under the circumstances of this case, that the proof of infringement was sufficient.

(Before LOWELL, J., District of Massachusetts, October, 1878.)

There were eleven of these suits brought upon the same patent, the pleadings in all of which were the same. Prior to the filing of the bills, a witness visited the several defendants at

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their respective places of business, and notified them that the complainant was the owner of the patent, and also not to use any machine that infringed the patent, and to make settlement for damages for past use. At the times of making these visits, witness saw, in some instances, the machines in actual use, while, in others, he saw the machines in the possession of the defendants, but not in actual use.

LOWELL, J.

A patent for improvements in moulding-machines was issued to Nathaniel Gear, November 8, 1853, and renewed for seven years in November, 1867. The patent was pronounced valid by Judge Shepley in 1873 (*Gear v. Grosvenor*, 1 Holmes, 215), but the bill in that case was afterward dismissed on a rehearing, in which it appeared that one Scott had an assignment of the invention, which, under a then recent decision of the Supreme Court, was held to include the extended term of the patent. See the note to the case, 1 Holmes, 224.

The bills in these cases were filed November 5, 1873, and evidence is given in the record that the complainant at that time held an assignment from the administrator of Scott, which supplies the defect found in his title, in the case against Grosvenor. In the defendants' brief, it is said that this assignment is not sufficiently proved; but the complainant swears to the signature of Smith, the administrator, and to having paid him the money, and copies from the records of the probate court prove that Smith was Scott's administrator, which is all that could be asked.

When the argument was opened the defendants asked leave to amend their pleadings so as to set up certain matters occurring since the bills were filed, namely, that in January, 1874, the complainant had conveyed all his rights in the patent, and in the damages, to one S. K. Lovewell, on certain terms of sharing profits and damages with Gear; that in February, 1874, Gear was made bankrupt, and that T. F. Nutter has been duly appointed assignee of his estate and effects, and the prayer was that the complainant be ordered to file a supplemental bill. The evidence upon which this motion was made was printed in the record.

Judge Shepley had refused a similar motion, but, as it was argued again, we have looked at the point. Before the motion was made to Judge Shepley, a bill had been filed against Lovewell by the assignee of Gear's estate in bankruptcy, which had been compromised by leave of court, and Lovewell had conveyed all his interest in the subject-matter to Mr. Nutter, the assignee in bankruptcy, and Mr. Nutter had conveyed to Mr. Livermore, and he to the complainant, so that the complainant has all the title he had when the suit was begun. It was for this reason that Judge Shepley denied the motion. These last-mentioned conveyances from Lovewell to Nutter, and from Nutter through Livermore to the complainant, were made after the extended term of the patent had expired, and were, therefore, assignments of a right of action only.

Where a plaintiff in an action at law, pending when he became bankrupt, had bought the right of action from his assignee in bankruptcy before any plea was interposed, it was held to be too late for the defendant to plead in abatement, and the case proceeded as if he never had been bankrupt. *Gerrish v. Gary*, 1 Allen, 213.

In equity the case is stronger, because bankruptcy and the appointment of an assignee would not abate the suit, but only require a supplemental bill to be filed, and perhaps under our bankrupt law, which provides that the assignee shall be admitted to prosecute pending actions, even that might not be necessary. But in whatever mode he is to be made a party, there is no occasion to make him one after he has reconveyed his interest to the complainant in the suit. The plea of matters occurring since the original pleadings is met by a replication of other matters still later.

The defendants objected to the admission of these assignments in evidence, because they had not been recorded in the Patent Office. But we have already seen that they were mere conveyances of the right to maintain these several suits or other similar actions—mere choses in action, in the narrow sense—after the patent itself had expired, and there is no law requiring such assignments to be recorded. Revised Statutes, section 4898, give the patentee or his assignee a right to grant

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and convey an exclusive right under his patent to the whole or any specified part of the United States, and add that a grant or conveyance shall be void as against a subsequent purchaser or mortgagee without notice, unless it is recorded. This means such a grant or conveyance of the patent right as had been before mentioned. In assigning a right in action, the person to be notified is he against whom the action is pending, so that he may not pay the wrong person. The defendants made no settlement with Lovewell or with Nutter, and may now safely account with the complainant.

It is urged that the evidence of infringement is insufficient in some of the cases. The charge being that the several defendants have used the machine, a witness is introduced who saw one or more infringing machines in the possession of each of the defendants. The objection is, that the court cannot properly infer a use of any of the machines, excepting those which the witness saw in actual use at the time of his visit. The complainant has called attention to the fact that the answers do not explicitly deny the infringement. Taking this circumstance with the other evidence, we think a jury would be warranted, if this were an action at law, to find infringement in all the cases.

Interlocutory decree for the complainant in each case.

Thomas L. Livermore, for the complainant.

D. Hall Rice, for the defendants.

EDWIN L. BRADY

vs.

THE ATLANTIC WORKS. IN EQUITY.

Gains and profits are the proper measure of damages in equity suits, except in certain cases where the injury sustained by the infringement is plainly greater than the aggregate of what was made by the infringer.

Actual profits made by the infringement, are the profits which the complainant is entitled to recover, excluding those made in the construction of such portions of the infringing machine as are not embodied in the patented mechanism.

Interest on profits will not be allowed.

(Before CLIFFORD, J., District of Massachusetts, October, 1878.)

CLIFFORD, J.

Gains and profits are the proper measure of damages in equity suits, except in certain cases where the injury sustained by the infringement is plainly greater than the aggregate of what was made by the respondent. Examples of the kind may be mentioned as falling within the exception where the business of the infringer was so improvidently conducted that it did not yield any substantial remuneration beyond expenses, and cases where the products of the patented improvement were sold by the infringer greatly below their just and market value, in order to compel the owner of the patent, his assignees and licensees, to abandon the manufacture of the patented product. *Birdsall v. Coolidge*, 3 Otto, 69. Redress was sought by the complainant, at a preceding term, for the infringement of a patent granted to him for a new and useful improvement in the construction of boats for dredging under water, as more fully set forth in the prior opinion of the court. Hearing was had, and the court entered a decretal order in favor of the complainant, and sent the cause to a

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master to compute and report the amount of the profits made by the respondents. Due report was made by the master, with the exceptions of each party to the same, which are the subject of the present investigation.

Exceptions of a general character taken by the complainant are three. (1.) Those that relate to allowances made by the master for general expenses, of which there are five in number. (2.) Extra charges were allowed by the master to the respondents for work done and materials furnished in constructing the dredge-boat, to which the complainant excepted. (3.) Interest was not allowed by the master upon the sum reported as profits, and the complainant excepts to the ruling of the master in that regard.

(1.) Complainant's exceptions as to the general expenses of their business, properly chargeable to the same, in the construction of the dredge-boat. Such expenses both parties agree should be allowed, but they differ widely as to the mode in which they should be computed and ascertained. Difficulty, it seems, attended the investigation, and the master took the calendar year or years in which the work was done, to which the complainant objected, and insisted that the calculation should only cover such portion of such year or years in which the respondents were actually engaged on the work. Had the complainant's theory been adopted by the master, the calculations would have been much more intricate and embarrassing, nor had he before him the requisite statistics to enable him to follow and verify the theory. Profits, beyond all doubt, are the proper measure of compensation in this case, and it is equally certain that the burden of proof is upon the complainant to show what the amount is that he is entitled to recover. Masters charged with that duty may examine the respondent, and, if necessary, inspect his books, but it is incumbent upon the complainant to furnish proof of whatever else is necessary to enable the master to make the proper computation. Actual profits made by the infringement of the invention secured by the letters patent are the profits which the complainant is entitled to recover, excluding those made in the construction of such portions of the infringing machine as are not embodied in the patented

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mechanism. Viewed in the light of those suggestions, it does not seem necessary to give each of the five exceptions touching the allowances for general expenses a separate examination. Matters in dispute are chiefly questions of fact, in respect to which it will be sufficient to say, that the whole report in respect to the five exceptions has been carefully reviewed, and the court is of the opinion that the five exceptions upon that subject must be overruled. Expenses of the kind are such as are incurred in the conduct of business for the benefit of the same in all its branches, and not properly chargeable to any one particular branch of the same. They are incurred for the maintenance of the entire business, and not in the interest of any one part of it above another, but are necessary, convenient or customary for all, and, therefore, are properly apportionable to the several branches of the business, when the profits of either are to be separately stated. *Hitchcock v. Tremaine*, 9 Blatchf., C. C. R. 386; *The Tremolo Patent*, 23 Wall. 528. Tested by the principle there laid down, it is clear that all these expenditures were properly allowed, as they were needful for all the undertakings, and were incurred for the benefit of all.

(2.) Extras charged, being actual expenditures, were properly taken into the account by the master, and the exception is accordingly overruled.

(3.) Interest on profits was properly refused. Such a charge was allowed by the circuit court in *Silshy v. Foote*, 20 How. 387, for which ruling the decree of the circuit court was reversed. *Moury v. Whitney*, 14 Wall. 653. Argument upon that subject is unnecessary, as the question is definitely settled by the decisions of the Supreme Court. *Littlefield v. Perry*, 21 Wall. 229.

Certain exceptions are also taken by the respondents to the report of the master, which deserve a brief consideration. Charges for extra work and materials furnished were allowed in the account of the respondents, in consideration of which the master required the respondents to assign the charges for the same to the complainant. Enough appears to show that the arrangement was an equitable one, and that the reasons given in support of it are entitled to prevail. Re-

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spondents' exceptions 2 and 3 are overruled, for the reasons given by the master, without further discussion. *Tool Co. v. Norris*, 2 Wall. 54; *Trist v. Child*, 21 Id. 450. Nor is any discussion necessary to support the ruling of the master which is the subject of complaint in the fourth exception of the respondents. His reasons are sound and well supported. *Rubber Co. v. Goodyear*, 9 Wall. 803.

Exceptions of both parties overruled. Master's report confirmed.

John S. Abbott, for the complainant.

Geo. P. Sanger and *R. R. Bishop*, for the defendants.

MILES S. CAHILL

vs.

BENJAMIN F. BROWN. IN EQUITY.

Inventors of a new and useful composition of matter, duly secured by letters patent, are entitled to the same protection as the owners of a patent for a new and useful art, machine or manufacture, and the rules and regulations in suits for infringement are the same in all material respects.

A claim in a patent for a bronze dressing for leather, as a new article of manufacture, composed of spirit-varnish and aniline fuchsine, with or without the addition of aniline blue or bronze-powder, as set forth and described, *Held*, to be for a patentable invention.

Such invention is not anticipated by a prior provisional English specification, which relates to a method of dyeing or staining woven fabrics or paper, and for coloring the surface of glass previously coated with pyroxyline by the application of a solution of the desired color to the previously prepared surface.

Nor by a prior patent for a peculiar mode of coloring and bronzing leather cloths, which consists in applying to such cloths, when properly pre-

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pared, certain well-known coloring matters composed of solutions of various aniline colors, and then burnishing the surface.

Where nothing is contained in the specifications of prior patents which would aid a mechanic to prepare the patented dressing, it follows that they are not of a character to anticipate the patent of the complainant.

Where prior patentees approach very near to the discovery of the complainant, but do not discover the principal feature of his invention, and are not able to give any directions by which the same can be successfully prepared and applied, the patent is not anticipated.

Letters patent No. 83,925, granted to Miles S. Cahill, November 10, 1868, for an improvement in bronze dressing for leather, *held* valid.

(Before CLIFFORD, J., District of Massachusetts, October, 1878.)

This suit was brought for infringement of letters patent No. 83,925, granted to Miles S. Cahill, November 10, 1868, for an improvement in bronze dressing for leather. The patentee claimed : " A bronze dressing for leather, composed of spirit varnish and aniline fuchsine, substantially as herein set forth, either with or without the addition of aniline blue or bronze powder, all as described, as a new article of manufacture."

CLIFFORD, J.

Inventors of a new and useful composition of matter, duly secured by letters patent, are entitled to the same protection for the property as the owners of a patent for a new and useful art, machine, or manufacture are entitled to receive, and the rules and regulations in suits for infringement are the same in all material respects. Letters patent in due form were granted to the complainant for a new and improved bronze dressing, and the patentee states that the object of the invention is to provide a fluid which will give a reasonably permanent bronze color to leather ; that it is more particularly designed as an accessory article in the boot and shoe trade, inasmuch as it will enable dealers to renovate their shoes or boots when the same have become shop-worn and tarnished, as is the case when such goods have been kept on hand for a considerable time, or have been much handled. Boots, shoes or slippers of any ordinary kind, as the patentee states, may be given a brilliant and durable bronze

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finish ; and he also states that the dressing is of important value for family use in renovating partly-worn bronze-shoes, to which he adds that the invention consists of a preparation of the aniline color called fuchsine, with any spirit-varnish, as shellac, copal or other analogous gum and spirit varnishes ; that a small quantity of aniline blue may be added, if desired, to increase the brilliancy of the dressing ; and that he mixes a small quantity of metallic bronze-powder with the fluid, when using it upon metal surfaces. Subsequent to that statement he gives his formula of preparation as follows : Aniline fuchsine, about two ounces ; shellac or other spirit-varnish, one pint. Explanations are given as follows : that the fuchsine is mingled with the varnish by means of a pestle and mortar or other suitable means, adding that the limit to the quantity of fuchsine is the point of saturation, or the quantity the varnish will dissolve, which is about two ounces of fuchsine to one pint of varnish. When the aniline blue is added, he adds about one half ounce of blue to the above proportions, and when bronze-powder is added he uses about two ounces of the powder to one gallon of the prepared dressing, always applying the dressing with a soft brush, which, as he states, will dry in one or two minutes. What he claims is a bronze dressing for leather as a new article of manufacture, composed of spirit-varnish and aniline fuchsine, with or without the addition of aniline blue or bronze-powder, as set forth and described. Exclusive ownership of the patent belongs to the complainant, and he charges that the respondent has infringed his exclusive right.

Service was made, and the respondent appeared and filed an answer, setting up the following principal defences : (1.) That the complainant is not the original and first inventor of the improvement. (2.) That it had been patented or described in the patent mentioned in the answer and in the printed publications, or some one of the same, also mentioned in the amended answer. (3.) That it had been in public use or on sale in this country for more than two years *prior* to the complainant's *application for a patent*. (4.) That the respondent has never made, and does not now manufacture, bronze-dressing in accordance with the formula of prepara-

tion set forth in the specification of the complainant's patent.

Defences not urged at the argument are omitted as unimportant in this investigation.

Beyond doubt fuchsine, which chemists sometimes call aniline red, is an article well known in the arts as a useful ingredient in dyeing. It is a solid crystalline substance, found in the form of grains or crystals having a brilliant emerald-green color by reflected light. Spirit-varnish is also well known in the arts and as an article of commerce, and has been for many years. Varnishes of the kind are solutions in alcohol of shellac or of other resinous substances, which, upon drying, leave a compact resinous and glossy coating. Liquid compounds of the kind have been applied to leather, but the objection to such a dressing for leather is that it makes the leather hard and causes it to crack. Efforts were made by the complainant to furnish a mixture that would give the desired coating to leather without impairing its flexibility or durability. Experiments showed him, that by mixing these two ingredients in proper proportions, a brilliant bronze color was developed from the green fuchsine crystal, when applied to leather, without producing any of the bad effects resulting from the use of the ordinary varnish of the shops. Two principal ingredients, fuchsine and spirit-varnish, constitute the mixture, and the evidence shows to the satisfaction of the court that it constitutes a valuable bronze dressing suitable for leather, and that the product, as described and patented, has gone into extensive use. Inquiries were made of the complainant's expert in respect to the nature of the improvement, and in his reply he gave it as his opinion, which seems to be well founded, that the essential feature of the invention consists in the discovery that the green color of the fuchsine may be changed to a bronze color by the use of spirit-varnish, and that the mixture when applied to boots or shoes, instead of stiffening the leather and causing it to crack, renders it more elastic and pliable by the use of the mixture. Beside the two principal ingredients referred to, the patent calls for alcohol and aniline blue, and in some contingencies for a certain quantity of bronze-powder. Instead of aniline blue, the

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respondent uses aniline violet, but the testimony shows that the latter consists largely of fuchsine and aniline blue mechanically mixed by the manufacturer, and that it performs the same function in the mixture as the ingredient used by the complainant. Argument to show the utility of the mixture is unnecessary, as the utility of the invention is made obvious by what has already been remarked, and the court is of the opinion that the invention is well and properly described, and that all objection to the form of the patent must be overruled. When the patent is correct in form, and is introduced in evidence in a suit for infringement, it is of itself *prima-facie* evidence that the patentee is the original and first inventor of that which is therein described and secured as his invention. *Seymour v. Osborne*, 11 Wall. 538.

Viewed in the light of that proposition it is clear that the decision in this case must turn upon the sufficiency or insufficiency of the defences set up in the answer. Different theories are maintained as to the way the ingredients operate when mixed to produce the patented product, but the court is of the opinion that it is immaterial, in this investigation, whether the result is produced by mechanical or chemical action, it being shown to a demonstration that the change of color is produced by mixing the ingredients, and that the mixture, instead of stiffening the leather and causing it to crack, renders it more elastic and pliable. *Cahill v. Beckford*, 1 Holmes, 53.

I. Coming to the defences, the first is that the patentee was not the original and first inventor. Proofs of various kinds were introduced in support of that proposition, of which those deemed most material will be examined. (1.) Rollason's provisional specification, which relates to a method, not satisfactorily described, of dyeing or staining woven fabrics or paper, and for coloring the surface of glass previously coated with pyroxyline, by the application of a solution of the desired color to the previously-prepared surface. 4 Watts' Chem. Dic. 776. Complainant's expert examined the specification, and testified to the effect that it does not describe or suggest, in the most remote degree, the dressing which is the subject of controversy. (2.) Two

patents or specifications, one English and the other American, were also introduced to support the first defence. They relate to a peculiar mode of coloring and bronzing "leather cloths," which will give a superior effect over that which can be obtained by the ordinary mode ; and the invention is described as consisting in applying to such cloths, when properly prepared, certain well-known coloring matters, consisting of solutions of various aniline colors, and then burnishing the surface. Suffice it to say they do not describe nor suggest the bronze dressing of the complainant, nor do they specify the ingredients or proportions to be used in preparing the solution. Nothing is contained in the specifications which would aid a mechanic to prepare the patented dressing, and it follows that they are not of a character to supersede the patent of the complainant. *Scymour v. Osborne*, 11 Wall. 555. (3.) Patent to Story, Bickerdike and Wilson, together with the prior provisional specification previously filed by the patentees. As described in the specification, the invention is a new method of bronzing metallic and other surfaces, and consists in the application of solutions, more or less concentrated, of aniline dyes, in alcohol or other volatile solvent, which possess a brilliant bronze-like lustre in the solid state, to polish prepared surfaces, and the statement is that when the solvent evaporates, either at ordinary or elevated temperatures, a film of the solid dyestuff remains upon the surface, presenting its characteristic lustre.

Superadded is also the statement that the solution may contain shellac or other soluble gum, for the purpose of rendering the bronzed surface more durable ; but no proportions are given, nor are any directions suggested or indicated, which would enable any one, skilled or unskilled, to prepare the patented dressing, nor is there any hint conveyed that, by the mixture of fuchsine with spirit-varnish in certain proportions, the green color of the fuchsine will be changed to bronze color by the action of the varnish, nor that the mixture, when applied to leather, will render it more elastic and pliable. Suppose it be admitted that the patentees in that patent approached more nearly to the discovery of the patented dressing of the complainant than any inventor that

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preceded in the invention in controversy, still it is clear to a demonstration that they did not discover the principal feature of the patented dressing in question, and were not able to give any directions by which the same can be successfully prepared and applied. (4.) Specification, completed and provisional, of Alexander Parkes is also set up in defence, which purports to describe an invention for improvements in ornamenting surfaces of paper, woven fabrics, and other material, to render the same suitable for book-binding and other similar uses.

For that purpose the patentee states that he embosses the paper, fabric or material, so as to form numerous small hollows or undulations in the surface, and then coats the surface with a thin varnish, consisting of dissolved pyroxyline or parkesine and fish-scales, the statement being that the fish-scales, for the most part, settle into the hollows, and as the solvent evaporates they become fixed in the hollows, and then the light playing on the undulations, and being strongly reflected by the fish-scales, where it strikes at a suitable angle, a very pleasing and brilliant effect is produced; and he adds that the paper, fabric or material may also be embossed subsequently to the application of the pearly varnish. Substitutes are also suggested in the specification, as follows: That in the place of a varnish made with fish-scales and parkesine, the varnish may be made with shellac, gelatine or other material, in lieu of parkesine, and that in some cases he prepares a varnish with dissolved pyroxyline or parkesine and aniline dye, which, when crystallized, has a metallic lustre, which, as he states, he applies to the surface of the paper, fabric or other material, and, as the solvent evaporates the dye is deposited with a metallic lustre. Surfaces prepared in that manner may, as the patentee states, be embossed as in the former case, and he further adds that he sometimes applies a varnish containing a bronze-powder to an embossed surface of paper, fabric or other material, so that the powder may be deposited in the hollows already described. Proportions of the ingredients to be used are then given in detail, and directions for mixing the compound, but they are so entirely different from the formula given in the complain-

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ant's patent for making the patented dressing that it is deemed wholly unnecessary to reproduce the same. Opposed to that conclusion is the testimony of the expert examined by the respondent. He says that specific directions are given in terms in the preceding patent for mixing fuchsine with shellac-varnish, without giving the usual admixture, but he is of the opinion that one skilled in the art would see, as he went on experimenting, that shellac would answer the purpose of pyroxyline, and that it would occur to him that the one might be substituted for the other; but that is not what the patent law requires.

Inventions patented here cannot be superseded by the mere introduction of a foreign patent or publication, though of prior date, unless the description or drawings contain and exhibit a substantial representation of the patented improvement, in such full, clear and exact terms as to enable any person skilled in the art or science to which it appertains, without the necessity of resorting to experiments, to make, construct and practice the invention, as he would be enabled to do from a prior patent for the same invention. *Betts v. Menzies*, 7 Law Times, N. S., 110. Even suppose the statements of the witness were uncontradicted, still they are not sufficient to support the defence under consideration; but they are not uncontradicted, as appears from the testimony of the expert examined by the complainant. His opinion is stated with great fulness and clearness. He says the exhibit describes a preparation for ornamenting various surfaces made by the use of a compound called "parkesine," by the use of a thin solution of the substance in which is dissolved from one to ten per cent of crystallized aniline color; that the directions of the patent in any of the proportions given would give a varnish which would simply produce the same appearance as the natural color of the crystal of the aniline dye employed. Take one hundred parts of parkesine solution and mix it with from one to ten per cent of crystallized fuchsine, and the result of allowing the solvent to evaporate would be to give a green metallic lustre after its application to a suitable surface, and he adds that nothing would be produced like the patented dressing by following

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the directions of the patent introduced in defence. Fuchsine, as he says, is nowhere mentioned in the patent, and he states that he finds in it no directions for the production of a bronze-varnish suitable for leather by the use of a green crystal like fuchsine and shellac-varnish.

Comparing the testimony of the two witnesses together, the court is of the opinion that the statements of the latter are correct, and that the exhibit given in evidence is not of a character to prove the first defence.

Proof in the form of depositions was also introduced by the respondents, to show that the dressing patented had been prepared, compounded and used by others prior to the supposed invention by the complainant. Four of those defences will be examined without entering at large into the details of the evidence, as that would extend the opinion beyond reasonable length.

One. Evidence of antecedent patents failing, the next defence is that the bronze dressing patented to complainant was invented by James A. White, prior to the invention described in the bill of complaint. Complainant's patent bears date November 10, 1868, and inasmuch as the record does not show the time when the application was filed, the *prima-facie* presumption is that the invention was made at the time the patent bears date.

White, the supposed inventor, died April 5, 1872, and respondent examined two principal witnesses, the son and the daughter, to prove this defence. According to the testimony of the son, the father was a dyer of silk, woollen, cotton and straw, and carried on business at South Canton, Massachusetts, and he states that he went into his father's employment in the spring of 1866, and that he left in the fall of the following year; and he also states, that while he was in the employ of his father he prepared a dressing made of shellac, alcohol and fuchsine, though he admits the latter substance was not known by that name at that time, nor does he state by what name it was known when he prepared the dressing. When asked if he had occasion to know the proportions of the ingredients used, he answered in the affirmative, and stated that he remembered the formula of four different kinds, as

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follows : 1. Formula for Class A : one third of an ounce of shellac, one ounce of alcohol, one sixth of an ounce of fuchsine to each ounce of alcohol. 2. Formula for Class B : one fourth of an ounce of shellac to each ounce of alcohol, and one sixth of an ounce of fuchsine to each ounce of alcohol. 3. Formula for Class C : three drams and twenty grains of shellac to each ounce of alcohol, and one sixth of an ounce of fuchsine and one quarter of a dram of sulphuric ether to each ounce of alcohol. 4. Formula for Class D : one sixth ounce of fuchsine to each ounce of alcohol, one sixth of an ounce of shellac to each ounce of alcohol, and one fourth dram of blue aniline to each ounce of fuchsine used.

He was then requested to state for what purpose each of the dressings was used, and he answered that Class A was made to be used for leather and iron, Class B for plaster and brass, Class C for paper and cloth, Class D for straw, adding that all this was as near as he could remember, and that the dressing was sold in a liquid form, including a large quantity of all the different classes. Inquiry being made of the witness whether he had recently manufactured the four classes of dressing, he said he had, and produced exhibits to that effect. On cross-examination he stated that the bronze he first saw was the bronze that his father had brought into practical use prior to his return from the army. Experiments, it seems, were subsequently made in order to make it water-proof, without success, the witness admitting that the result was wholly unsatisfactory. Most of the father's experiments were made while the witness was absent in the army. They were practiced, as his father told him, at different times for a period of nearly two years, and he states that his father finally concluded, as he informed him, that gum-shellac gave the most satisfactory results, and that he (the father) thought if the liquid could be brought into practical use, with any degree of durability imparted to it, he would be amply repaid for all his experiments. None of these experiments were within the personal knowledge of the witness, and he expressly testifies that the experiments made by his father, after he (the son) returned from the army, consisted of endeavors to make the bronze water-proof.

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Support to the testimony of the son is derived from the testimony of his sister. He produced a recipe for Class A, to the effect following, to wit : one third of an ounce of shellac to one ounce of alcohol, and one sixth of an ounce of fuchsine to one ounce of alcohol, and the sister testified that she wrote that formula, by her father's directions, between the spring of 1866 and the fall of 1867, after her brother's return, and that she applied it to the two exhibits specified in his testimony. Other witnesses were examined, and other circumstances proved, tending to confirm the testimony of the brother, and in support of the theory that the father invented the patented dressing prior to the date of the complainant's patent. Much countervailing proof was introduced by the complainant, which is decidedly contradictory to the testimony of the son, and tends strongly to show that the father never made any such invention, that he never knew that the effect of using spirit-varnish with fuchsine would be to change the green color of the fuchsine to a bronze color, or that the mixture, when properly made, would render leather more elastic and flexible. Enough appears to warrant the conclusion that the father made some kind of dressing for the goods which he was in the habit of dyeing in his business, but it is equally clear that it was never satisfactory, and that he bought as much, or more, dressing of another manufacturer than he ever sold during the period when it is said he manufactured a dressing like that described in the complainant's patent. Two years after the son left him he gave up his business and never resumed it, and ceased to manufacture dressing of any kind, nor did he ever include in his business the bronzing of leather.

Taken as a whole, the evidence convinces the court that he (the father) never knew that the color of the crystals in fuchsine would be changed by the use of varnish, even if he knew anything of the properties or components of the former substance, or of the effects the mixture would produce when applied to leather, which are matters of grave doubt. Solutions which would produce a green metallic lustre, it appears, were quite common during the period when the son of the supposed inventor was in the employ of his father,

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and perhaps for a year or two later, and the evidence shows that they were chiefly used to color straw and other millinery goods, when first introduced, but the complainant's expert testifies that they did not in any respect resemble the appearance of complainant's dressing. Quite a number of straw-goods manufacturers employed the witness about that time to experiment for them with a view to produce a good bronze for ornamenting hats, and he states that he examined many bronzed hats, and solutions used for bronzing the same, and that he made many experiments in the same direction. Where a green reflection was desired fuchsine was used, and where a bronze was wanted aniline violet or blue was employed, and he adds that in all the samples examined the bronze produced was substantially the same color as the crystal employed, though inferior in lustre. Green crystal, as the witness states, was used but little, the bronze produced by violet or blue being the favorite color; and he states that the addition of sufficient varnish to make the bronze reasonably permanent, reduced the brilliancy so as to make it useless. The bronze in that period was produced by adding very little varnish to a comparatively strong solution of blue or violet, and in that way a fair bronze was produced, but it was not permanent, nor sufficiently so to render the hats wearable, and they rapidly went out of use. During the summer of 1867 the witness states that all the straw manufacturers of his vicinity were making these styles of hats, in imitation of goods received from Paris, and that many, including himself, were experimenting for the purpose, if possible, of making the bronze permanent, and at the same time satisfactory in color; and he adds, in that connection, that he was unable to do so, and that the same, so far as he knows, was true of all the other parties engaged in such experiments. Endeavors of the kind being unsuccessful, the style of hats was abandoned, and the witness states that he never heard of a bronze-varnish, which had a good color and was reasonably permanent, until his attention was called to the process of the complainant, which coincides, strikingly, with what the son states that his father told him upon the same subject, to wit: that the father thought, if the liquid

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could be brought into practical use, with any degree of durability imparted to it, that it would amply repay him for all his experiments.

Both sides agree that fuchsine was not known among mere practical men by that name, nor does the son or daughter state by what name it was known when used by their father. Repeated experiments were made by Consider Southworth for the purpose of producing a bronze-varnish, and it appears that he made and used a mixture of the kind, which in the year 1867, he sold to James A. White in considerable quantities, as appears by the record. His mixture was set up in the prior case as superseding that of the complainant, but it will not be necessary to give that matter any examination beyond what it received by the court in that case. *Cahill v. Beckford*, 1 Holmes, 51. By the opinion of the court it appears that Southworth produced and sold an article which answered the purpose for dressing straw hats or bonnets, or for giving a fancy finish to the edge or shank of a boot or shoe, imparting a gilt or goldish color, but the judge states that the evidence showed that it was not suitable for leather, and that the method of making it will not produce a good dressing of any kind for leather, and certainly not a dressing substantially like the complainant's patent. Persuasive support to the theory of the complainant is also derived from the testimony of John Dehm, who for several years was in the employ of the party whose bronze dressing is set up as anticipating that of the complainant. He commenced to work with White in 1864, and did not leave his employment until November or December, 1867, covering the whole period the son was in the employment of his father after the former returned from the war of the rebellion. Speaking of their attempts to mix dressing, he says they tried to mix shellac, aniline blue, and blue purple with alcohol, and did not succeed—could not make it work—and then tried to mix half of their mixture with half of that prepared by Southworth; that then they could get a color out of the mixture; that they tried to use a great many other things, but they did not amount to anything, and they did not use them, but threw them away, and never got a good thing out of their experiments; that

only a half-gallon of the whole they made was fit to use by mixing it with the dressing of Southworth. Attempt is made to contradict the witness, but the testimony introduced to confirm his statements, in the opinion of the court, outweighs that which was introduced to impair his credit. Suffice it to say, without entering further into details, that it is conclusively proved that White, during the period in question, bought bronze dressing of Southworth in quantities sufficient to account for all his sales, without giving the least credence to the theory that he ever invented or knew anything about the patented product of the complainant.

Two. Suppose that is so, still it is insisted by the respondent that the testimony of Isidore Birgé is sufficient to establish the defence of prior use; but the court is entirely of a different opinion, for at least two reasons: (1.) Because the statements of the witnesses are not sufficiently definite as to the time when he commenced to manufacture the dressing. His recollection is that it was in November or December, 1866, but Emile L. Bisset, his dyer, states that the first time they tried to make the substance, four years ago, which was in 1873, they did not exactly succeed, which must be regarded as supplying an important defect in the memory of other witnesses. (2.) Because there is not enough in the testimony of the first witness to show what the proportions were of the ingredients which they used.

Three. Special reference is also made by the respondent to the testimony of Frederick Rodrigo for the same purpose. What he states is that in November, 1866, he used a dressing made of shellac-varnish and aniline red, or fuchsine, for bronzing piquets, wild grasses, leaves, hats, and flowers. His formula of preparation, if such it may be called, was shellac, aniline red, and alcohol, sometimes blue aniline, sometimes violet, and the proportions of the ingredients, as given by the witness, were about twenty cents' worth of shellac, thirty-five cents' worth of alcohol, and two ounces of aniline. They let it stand over night, and then diluted it with alcohol and shellac about one half; and he adds that they first dissolved the shellac in the alcohol, and put in sufficient aniline until it became the shade of color they

wanted to use. Throughout, his testimony is very ambiguous, and shows to the entire satisfaction of the court that he never had any idea, theoretical or practical, of a bronze dressing in which the original green color (fuch-sine) was changed by a given proportion of varnish so as to produce a permanent bronze on the surface to which it was applied. Instead of that it is clear that if he ever produced a bronze it was by the use of aniline violet or aniline blue, so fully explained and shown to be worthless by the expert witness of the complainant.

Four. Incomplete as the explanations as to the manner of compounding the mixture are, as given in the printed publication referred to in the testimony of William J. Jenks, it will be sufficient to say in respect to it that it is not of a character to support the defence, that the complainant is not the original and first inventor of the patented improvement, nor is there anything in the testimony of that witness which can have any such effect, for the following reasons : (1.) Because the date of the supposed manufacture by the witness is not fixed with sufficient definiteness. (2.) Because the testimony of the witness leaves it uncertain what were the proportions of the ingredients used in manufacturing the alleged dressing. (3.) Because the dressing which he manufactured was not substantially the same as that described in the specification of the patent.

II. Remarks to show that the second and third defences cannot be sustained, beyond what have already been made, are quite unnecessary, and they are accordingly overruled. Suggestion is made that the court in the prior case was misled by the testimony of one of the complainant's witnesses, but the court as now constituted is not able to see any just foundation for that supposition, or that the suggestion, if correct, can have any material bearing in the determination of the present controversy.

III. By the rules of law the respondent must prove want of novelty, and the complainant must prove infringement, which is the only remaining question to be considered. Since the argument, the question has been carefully considered by the court, the result of which is that the doubts which then arose in

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the mind of the court have all been removed, for the following reasons : (1.) That the practical working of the mixtures is substantially the same. (2.) That the flexibility, reflection, and durability of the same, are substantially alike. (3.) That the development of the bronze appearance from an aniline color, having a green reflection, is accomplished in both cases by the same means and according to the same principles. (4.) That the change in the color of the fuchsine is accomplished by the same means, and that the beneficial effect produced by the mixture is the same, whether made by the one or the other formula.

Decree in favor of complainant for an account, and for an injunction.

Browne & Holmes, for the complainant.

George L. Roberts and *E. P. Brown*, for the defendant.

NORMAN C. MUNSON ET AL.

vs.

THE GILBERT AND BARKER MANUFACTURING COMPANY.
IN EQUITY.

A claim for : "The application and use of the meter-wheel with its case and contents as an air-blast apparatus, operated by weights or otherwise, not meaning to claim the method of using the meter for measuring gas," construed in connection with the specification, is not for a mere use or result, but for the meter itself.

Two prior patents which, taken together, would have made up the invention of the patentee, will not anticipate the patent, where neither of them alone shows the complete invention.

The fourth claim of letters patent No. 12,535, granted to John C. Pedrick, assignor of Charles Cunningham, March 13, 1855, for benzole vapor apparatus, *held* valid.

(Before LOWELL, J., District of Massachusetts, October, 1878.)

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LOWELL, J.

Patent No. 12,535, dated March 13, 1855, was issued to John C. Pedrick, assignor of the plaintiffs through a chain of title not disputed. The inventor was Charles Cunningham, and we may say here that it is proved to our satisfaction that he made the invention as early as May 7, 1851.

In the specification Cunningham begins with the statement that he has invented a new and useful machine or apparatus for driving a current of air through a reservoir containing benzole or other hydrocarbon for the purpose of generating an illuminating gas or vapor therefrom. He then says his invention consists in the use of a common gas-meter wheel, or its equivalent, revolving in water or other liquid, or of other equivalent apparatus, for forcing a current of air through a reservoir containing either of the aforesaid hydrocarbons or admixtures, etc. He then describes the mode of preparing and using the gas-meter by driving it with a weight or spring, and by admitting the air through an opening, A, of the meter-case, and forcing it out of the end thereof by a pipe into a reservoir. He then describes the mode of charging the current with the hydrocarbons and conducting it to the burner.

The first three claims are for combinations or parts of the machine, which are none of them used by the defendants. The fourth claim is for: "The application and use of the meter-wheel with its case and contents as an air-blast apparatus, operated by weights or otherwise, not meaning to claim the method of using the meter for measuring gas."

It is admitted that two persons in this country invented a similar mode of furnishing an air-blast for making illuminating-gas not far from the time of the patent. One of them was refused a patent, and with the other, who had obtained one before Cunningham's application was filed, an interference was declared, in which the Patent Office decided in favor of Cunningham as, in fact, the first inventor. This is the patent of O. P. Drake. From the evidence in the record we agree with the conclusion reached at that time, and are of opinion that the invention of Cunningham was earlier. Similar remarks will apply to Adams.

Two English patents are produced which, taken together,

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would have made up, perhaps, the air-blast apparatus of Cunningham. In Lowe's patent he recommends the use of a weight to drive a gas-meter ; but his purpose appears to us to have been to increase and regulate the action of the gasometer, and not to make an air-blast apparatus. Critchett, on the other hand, admitted air into his apparatus for certain purposes, but did not have an air-pump at all resembling the plaintiffs'.

We think the slight change, obvious perhaps to an inventor, of admitting air into a meter, and using the meter-wheel as an air-pump, although it had before been used with similar machinery to increase the force of the gasometer, was a patentable invention.

The claim itself is attacked as too broad. It is said to claim a mere use or result. The language is not very well chosen, but we think, taking the claim and specification together, it is intended to claim the meter itself as described, and for the purposes set forth, as contradistinguished from an ordinary meter for measuring the flow of gas. Possibly it may have been intended to claim such a meter used as an air-pump in other combinations of machinery, if it should be found useful in any such, and there is nothing in the record to show that such a claim might not be supported. Infringement is clearly proved. The patent having expired, no injunction is asked for.

Interlocutory decree for the complainants.

T. L. Livermore and G. W. Morse, for the complainants.

William Stanley, for the defendant.

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THE AMERICAN WHIP COMPANY

vs.

HEZEKIAH LOMBARD. IN EQUITY.

The patentee or owner of a patent for a combination is as much entitled to equivalents as the patentee or owner of any other class of inventions.

By an "equivalent" of an element in a combination, it is meant that the element or ingredient substituted for the one withdrawn, performs the same function as the other, and that it was well known at the date of the patent in question as a proper substitute for the element omitted in the patented combination.

A party who merely substitutes an old element or ingredient for one of the elements or ingredients of a patented combination, is an infringer if the substitute performs the same function as the one omitted, and was well known at the date of the patent as a proper substitute for the element or ingredient employed in the patented combination.

Merely formal alterations of a combination in letters patent do not constitute any defence to the charge of infringement, as the inventor of such an improvement is as much entitled to suppress every other combination of the same devices to produce the same result, as the inventor of any other patented process or product.

The invention of L. Hull of a lathe, (for which letters patent No. 53,003 were granted March 6, 1866, and reissued August 15, 1876; No. 7,262,) which consists chiefly in the combination of a holding and feeding mechanism with revolving cutters, having their axis of rotation at right angles or nearly so to the axis of the stock, and of guides for directing and controlling the action of the cutters, is valid, and is infringed by the use of a machine in which numerous blades are substituted for the burrs of the patentee, a formal change merely being made in the clamping and advancing mechanism by combining the two in one apparatus, instead of performing the operation by two separate devices.

(Before CLIFFORD, J., District of Massachusetts, October, 1878.)

CLIFFORD, J.

Power to grant letters patent is conferred by an act of Congress, and when that power has been lawfully exercised,

and a patent has been duly granted, it is of itself *prima-facie* evidence that the patentee is the original and first inventor of that which is therein described and secured to him as his invention. Defective patents may in certain cases be surrendered and reissued for the same invention in a corrected form, and when that is done in conformity with the requirements of law, the same *prima-facie* presumption arises in favor of the patentee as that which arose in his favor from the original patent before it was surrendered. Sufficient appears to show that the assignor of the complainants became and was the inventor of a new and useful improvement in gauge-lathes, and that letters patent were granted to him as such inventor for the same; that the patentee, for due cause shown, surrendered the original patent, and that a new patent, with an amended specification, was subsequently issued to the complainants for the same invention, which is the subject of the present controversy.

Service was made, and the respondent appeared and filed an answer. Such defences only as were pressed at the argument will be noticed, of which the following are the most material: First. That the assignor of the complainants was not the original and first inventor of the patented improvement. Second. That the charge of infringement is not proved; that the respondent never made, used, or sold the patented improvement, and never in any way infringed the rights of the complainants under their patent.

Applicants for a patent are required by the patent act to give a short title or description of the invention or discovery, correctly indicating its nature and design, and, pursuant to that requirement, the original patentee stated in the specification that he had invented a new and useful machine for dressing whip-handles or stocks, or other articles of a like nature, adding thereto that the object of his invention was to properly round and shape the handles or stocks of whips and other articles of like character.

Important explanations are superadded, substantially as follows: That to accomplish the work correctly, the stock must travel longitudinally toward the cutting devices, or vice versa, in order that the material removed from the stock

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may be stripped or cut lengthwise of the same, instead of around it or transversely, so that the surface of the stock will be left smooth ; and, he adds, that the proper form or shape must be given to the stock at the same time that its surface is being finished, and consequently that the cutting apparatus must be controlled by a guide corresponding to the taper or form of the stock or handle of the whip. Preceding, as those explanations do, the statement of the claims of the patentee, they show in concise terms the true nature and character of the organized machine, and it is obvious that he intended by those explanations to illustrate in a general way the mode of operation by which the several devices, when combined, will accomplish the described new and useful result.

Decisive support to that proposition is found in the paragraph which follows those explanations, in which the patentee states that the invention consists chiefly in the combination of a holding and feeding mechanism and revolving cutters having their axis of rotation at right angles, or nearly so, to the axis of the stock (meaning the whip-handle) to be rounded and shaped, and the described guides for controlling the action of the cutters (meaning the described cutting apparatus of the machine) as fully explained in the specification and drawings. Machines of the kind must of course have a frame of a suitable form to support the other parts of the machine, as shown in the drawings. The machine in this case has a carriage mounted upon the frame, the carriage being arranged to travel on guides or rails, for the purpose of giving a longitudinal motion to the stock. Standards are also mounted upon the carriage for supporting the mandrels which hold the stock in proper position to be guided to the cutters.

Devices of the kind for holding the stock are indispensable, and the specification shows that they are rotated by suitable gearing in such a manner as to keep the stock constantly revolving while it is under the action of the cutting apparatus. Means of attaching the stock to the mandrels are also shown, which is accomplished by clasping each end between a pair of levers, pivoted on a device called a " head," mounted

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on the inner ends of the mandrels, which serves as a fulcrum to the levers, and also causes them to revolve. Between the outer end of each pair of the levers there is arranged a cone, which can be longitudinally adjusted by a screw formed on the mandrels in a way to spread or release the outer ends of the levers, so as to close or open their inner ends, between which the opposite ends of the stock are held in proper position to the cutters. Suffice it to say, without entering further into the details, that every element of the machine and its mode of operation are given in the specification, confirming the remarks previously made that the invention consists in the combination of the described mechanism for rounding and shaping stocks or handles for whips, or other articles of a like nature, including the described holding and feeding mechanism, together with the cutting apparatus, having its axis of rotation at right angles, or nearly so, to the axis of the stock, with the described guides for controlling and regulating the action of the cutters with their entire apparatus, as shown in the specification and drawings.

Five claims are annexed to the specification, the first two of which only will be reproduced, as it is not now claimed that the other three have been infringed :

" 1. In a machine for shaping whip-stocks, the combination of two rotating and adjustable clamps for holding the whip-stock with revolving cutters, whose axis of rotation is at right angles to the axis of the stock, substantially as described, for the object set forth.

" 2. In a machine for shaping whip-stocks, the combination of revolving cutters, the adjustable and rotating clamps for holding and revolving the whip-stocks, and the guides through which the stock is passed for firmly holding the stock while being dressed by the cutters, as described."

Whip handles or stocks are constructed in the rough before they are in a suitable condition to be dressed and smoothed, or rounded and shaped, by the machine described in the complainant's patent, which is true also of the whip-stocks manufactured by the respondent. Undressed whip-stocks of the kind in controversy are described by the respondent as composed of eleven pieces, as follows :

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I. A middle piece of wood or rattan, called a wedge, to which is attached a spike at one end and a piece of whale-bone at the other.

II. On this central core or wedge are laid four other pieces of rattan, called sidings, which are half round, with one edge planed off so as to allow them to fit the wedge or centre piece.

III. Then there are four other pieces of rattan, called chinks, shaped so as to fit the pieces of siding, to fill up the crevices between the siding pieces and make the handle large enough for a whip-stock.

IV. All these pieces being thus prepared, they are then glued or cemented together before the stock is in a suitable condition to be dressed and finished in the machine. Stocks of the kind are composed of rattan, whale-bone, and glue, besides the spike at the butt-end. When constructed in the rough they are not fit for the market. Four things are required of the machine in order to dress the rough stock and make it salable as a finished article: First. It must have means for holding the stock during the operation of dressing the article. Second. It must have means of advancing and rotating the article at the same time. Third. Means of guiding the rough article must be furnished, so as to preserve its shape during the operation. Fourth. It must have a cutting apparatus to reduce the circumference of the rough article from butt to tip as it is advanced and rotated.

By referring to the specification, it appears that the patentee adopted, for holding devices, two standards to support two mandrels having a pair of levers, which clasp each end of the whip stock. Having devised means to hold the article, his next step was to provide an apparatus to advance the stock and cause it rotate at the same time, which he accomplishes by a carriage travelling on rails and by a gearing causing the mandrels to revolve as the apparatus advances. Two notched plates are provided for guiding devices, sliding upon each other, so that when the stock is in the notches of the plates and between them, "they close upon the stock and steady it under the cutting action." Two upright revolving steel burr-cylinders are provided as reducing devices, and it must be admitted that they are admirably adapted to

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the accomplishment of the function, without risk of injury, even to the most slender part of the stock.

Argument to show that the patented invention is one of merit and of a highly useful character is quite unnecessary, as the remarks already made are amply sufficient to demonstrate that proposition to every impartial and well-informed mind ; but it must be remembered that it is not a patent for the result, nor can it receive a construction which will shut out all other improvements. None of the elements or devices of the patent are claimed, nor do either of the claims, which it is alleged the respondent has infringed, warrant the construction that the original patentee was the original and first inventor of the entire machine. Instead of that, both the first and the second claims plainly proceed upon the ground that the invention is for a combination of old elements, and the words of the specification afford persuasive and convincing proof that such is the true theory of the patent, whether the question is tested by the specification or the claims which it is alleged have been infringed. Viewed in the light of these suggestions, it is clear that the invention consists chiefly in the combination of a holding and feeding mechanism with revolving cutters having their axis of rotation at right angles, or nearly so, to the axis of the stock, and of guides for directing and controlling the action of the cutters, as described in the specification and shown in the drawings.

Suppose that is so, still it is contended by the complainants, and well contended, that the patentee or owner of a patent for a combination is as much entitled to equivalents as the patentee or owner of any other class of inventions. Doubts at one time existed as to the correctness of that proposition, but it is now well settled in accordance with the views of the complainants. *Gould v. Rees*, 15 Wall., 194 ; *Gill v. Wells*, 22 Id., 28.

Questions of the kind usually arise in comparing the machine of the defendant with that of the plaintiff, and the rule is, that if the defendant omits entirely one of the elements or ingredients of the patented combination without substituting any other in its place, he does not infringe the plaintiff's patent ; and if he substitutes another in the place of the one

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omitted, which is new, or which performs a substantially different function, or, even if it is old, was not known at the date of the plaintiff's patent as a proper substitute for the omitted element or ingredient, then the charge of infringement is not maintained. By an equivalent in such a case, it is meant that the element or ingredient substituted for the one withdrawn performs the same function as the other, and that it was well known at the date of the patent in question as a proper substitute for the one omitted in the patented combination. Hence it follows that a party who merely substitutes another old element or ingredient for one of the elements or ingredients of a patented combination, is an infringer if the substitute performs the same function as the one omitted, and was well known at the date of the patent as a proper substitute for the element or ingredient employed in the patented combination. *Roberts v. Harnden*, 2 Cliff., 504. Mere formal alterations of a combination in letters patent do not constitute any defence to the charge of infringement, as the inventor of such an improvement is as much entitled to suppress every other combination of the same devices to produce the same result as the inventor of any other patented process or product. Examples of the kind frequently arise in suits for infringement, as where a spring is substituted for a lever to produce power, or where a weight is substituted for a spring to produce pressure, and many others, where the same rule must be applied.

Much discussion of the first defence is not required, as it is obvious that the evidence introduced by the respondent is insufficient to overcome the *prima facie* presumption arising from the patent, that the assignor of the complainants was the original and first inventor of the improvement. Incomplete as the evidence is in respect to the Sacket machine, it is clear, beyond all doubt, that it cannot be held to support that defence. Taken as a whole, the evidence fails to satisfy the court that the supposed invention was ever completed as an operative machine. Nor is the evidence sufficiently full and explicit to enable the court to understand what its construction was, or its precise mode of operation. Persistent efforts appear to have been made by the supposed inventor

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to induce manufacturers in his neighborhood to adopt it, without success ; and the proof is that, in almost every instance in which it was tried, it split the whalebone, and that, when it did not, it left it in a worse shape to finish by hand than it was before the stock was put into the machine.

These efforts to introduce the machine were made twenty years ago, and have not since been renewed, showing to the satisfaction of the court that it was a mere experiment, and that it was finally abandoned. Such a defence requires better evidence to support it, and, in the absence of such evidence, the defence must be overruled. Grant that, and still the respondent denies that he has ever made, used, or sold the patented improvement, which, in the view of the court, is the principal issue between the parties. Questions of the kind where the invention is embodied in a machine, are usually best determined by a comparison of the machine made by the respondent with the mechanism described in the specification and drawings of the complainants' patent. Very material aid in making that comparison has been derived in this case from the testimony of the expert witness examined by the complainants.

Nothing can be plainer than the proposition that it was the object of the assignor of the complainants to construct a machine that would round and shape undressed whip-stocks and other similar articles with greater facility and with less expense than it could be accomplished by hand, all of which he effected by the devices of the machine described in the specification and shown in the drawing, and it is equally certain that the respondent desired to accomplish the same thing and nothing more, unless it was to change the form of the devices so as to avoid the charge of infringement. He knew what the devices were which were employed by the assignor of the complainants, and he was entirely familiar with the patented machine and its mode of operation. Years of experience had proved its utility and adaptation to accomplish the object for which it was constructed and patented.

Beyond all question it embodies a particular plan, and the evidence satisfies the court that the respondent borrowed every feature of his plan from the patented machine.

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All agree that such a machine, to be successful, must have a holding and feeding mechanism ; that it must have means to cause the stock to revolve as it advances, and that it must have revolving cutters with axis of rotation at right angles, or nearly so, to the axis of the stock, and that it must be provided with guides for controlling and regulating the cutters in order to keep the stock constantly revolving, while it is subjected to the cutting or rasping operation. Proof of conclusive character is found in the record that the object of the respondent in constructing his machine was the same as that of the assignor of the complainants, and the court is of the opinion that he accomplishes it by substantially the same means. Decided support to that proposition is derived from a comparison of the two machines, and from the testimony of the expert witnesses.

Enough appears to show that the respondent adopted the same combination as that adopted by the assignor of the complainants—that is, that he provided means for holding, presenting, advancing, rotating, and reducing the undressed stock as is described in the specification and drawings of the patent. Changes were made by him in two of the necessary devices. Instead of burrs to scrape off the enamel of the rattans and whalebone, he uses numerous blades, sometimes as many as a hundred and twenty, that perform the same function as the burrs in the patented machine. Blades of the kind were first adopted by the original patentee, but he soon discarded them and substituted the burrs, which are much to be preferred. Formal change is also made in the clamping and advancing mechanism, by combining the two in one apparatus—that is, the respondent's device is made to do two things instead of having the two things done by separate devices, the difference being that the assignor of the complainants clamps his stocks to a carriage and moves the carriage, whereas the respondents make the clamps also serve as the propelling instrumentality. Suffice it to say that the expert examined by the complainants states that he finds in the model of the respondent what he regards as substantially the same combination of devices and for precisely the same purposes as those specified and claimed in the first and second

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claims of the complaiants' patent. Extended reasons are given by the witness in support of the conclusion, but it is unnecessary to reproduce this testimony. It is fully corroborated by a comparison of the alleged infringing exhibit with the patented improvement. Nor is it necessary to examine into the extent of the infringement, as that will fall within the province of the master.

Decree for the complainants for an account, and for an injunction.

Solomon J. Gordon and Thomas L. Livermore, for the complainants.

Hezekiah Lombard, pro se, defendant.

ELISHA FOOTE

vs.

GEORGE FROST ET AL. IN EQUITY.

The law does not disqualify a Commissioner of Patents from obtaining a patent after his term of office has expired, for an invention made by him while holding such office, and in such case the invention will date back to the time when it was actually made, although he could not then have obtained a patent for it.

Where the complainant's patent was for a wire bag fastener, and a prior patent was for a device of a similar structural plan, but made of a slotted metal plate instead of wire, and was intended as a fastener for the lacings of shoes and corsets, and there was no evidence that the prior invention would answer the purpose for which it was intended: *Held*, that under the circumstances, it would not be an anticipation of the complainant's invention.

Letters patent No. 135,899, granted to Elisha Foote, February 18th, 1873, for a bag tie, *held* valid.

(Before CLIFFORD and LOWELL, JJ., District of Massachusetts, October, 1878.)

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LOWELL, J.

The complainant holds a patent, No. 135,899, for an "improvement in grain-bands, bag-ties," etc. The claim is for a holder substantially as described in the specification, which is a piece of annealed iron wire, bent into the shape shown in the drawings; the upper part is oblong, and makes a loop to which the band or cord is permanently attached; the free end of the cord is then passed round the grain-bag or other thing to be held, and brought between the straight or converging sides of the lower end of the holder, where it is held by the strain, which tends to tighten the wire, but can be at once released by a pull on the free end of the cord.

The patent is dated in 1873, but the evidence is clear and uncontradicted that the invention was made in 1867, or early in 1868. At that time the complainant was Commissioner of Patents, and the respondent argues that he was prohibited by law from taking out a patent, after his commission had expired, for an invention that he made while he was in office. The words of the statute and its intent alike prove that the prohibition upon the Commissioner was not intended to fetter his inventive faculties, or deprive him of the fruits of his skill or ingenuity, but merely to prevent bias and interest in his public capacity; when that ceases, the interdict is removed. The law in 1867 was, that the Commissioner should be disqualified and interdicted from acquiring or taking, except by inheritance, during the period for which he should hold his appointment, any right or interest, directly or indirectly, in any patent "which has been," that is, before the date of the statute, "or may hereafter be granted." Stat. July 4th, 1836; 5 U. S. Stat. at Large, 118. This provision is now found in Rev. Stat., section 480, somewhat simplified, but with the same meaning, that the Commissioner shall not voluntarily acquire any interest in any patent during his term; but, he no more loses his right to take out a patent after he becomes a private citizen, than he forfeits one which he already held before his appointment; and there is no more objection to giving his invention its true date, in his case, than in any other.

The only question of fact which has been made is, whether either of the four patents exhibited by the defendants antici-

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pates the plaintiff's invention. Two of them are dated in 1870, after the time at which, as is now admitted, the plaintiff had completed his discovery. The third, that of Cook, is for a device entirely different in its mode of operation from that of the complainant, and is not much relied on by the defendants. The fourth is that of Butterfield, No. 57,247, granted in August, 1866, for an improved fastening for shoe-lacings, which the inventor says will hold the lacings of a shoe, corset, or other article, so as to prevent the lacing from working loose in the eyelets. It describes a thin plate of metal, to be inserted in the upper part of the shoe where the lacing ends; it is to be of elliptical or other suitable form, with a slot with converging sides, and an eye through which the lacing may enter, and the patentee says, that, as the lacing is drawn toward the point or angle of the slot, it becomes pinched by the opposite converging sides, so as effectually to hold the lacing. He says, in another passage, that the friction of the sides of the slot will suffice to hold the lacing firmly, and prevent it from getting loose. Here is, undoubtedly, a device very closely resembling the plaintiff's holder. The doubt insisted on by the plaintiff in his argument seems to us to have much force. It is that, though the patentee is described as living in Boston, no evidence is produced that his mode of fastening proved to be practicable, as applied to the lacing of a shoe, and that the absence of such evidence, in a place where the trade in shoes is so largely carried on, is noticeable. Upon inspection of Butterfield's specification and drawings, and of a specimen shoe introduced in argument, we are led to doubt whether this mode of fastening would answer the purpose. The strain is quite differently applied in a shoe from what it is in a grain bag, and it is not clear to us that the friction of the sides of the slot would hold the lacing firmly. It may be that the difficulty, if it be a real one, arises from the plate being made of sheet metal instead of wire. If the result is attained by the plate, a mere change of material would be unimportant; but, when the question is: Who first completed a working device?—a change of material by which the result is for the first time obtained is very important.

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The point is a narrow one, but on the whole we think it well taken, and that the defendant has failed to prove that Butterfield's invention did, in fact, anticipate the holder of the plaintiff in the sense of the patent law.

Interlocutory decree for the complainant.

Elisha Foote, pro se, complainant.

James E. Maynadier, for the defendants.

DARIUS GOFF ET AL.

vs.

WILLIAM H. STAFFORD ET AL. IN EQUITY.

A patented invention cannot be superseded by the mere production of a British provisional specification, though of prior date, unless the description and drawings contain and exhibit a substantial representation of the patented improvement in such full, clear, and exact terms as to enable any person skilled in the art or science to which it appertains, to make, construct and practice the invention to the same practical extent as they would be enabled to do if the information was derived from a prior patent.

The provision of the act of July 8th, 1870, that patents taken out in the United States for inventions previously patented in a foreign country shall expire at the same time with the foreign patent, or, if there be more than one, at the same time with the one having the shortest term, but in no case shall it be in force more than seventeen years, does not apply to letters patent of the United States granted previous to such enactment. The cases of *Weston v. White* and *Badische Anilin and Soda Fabrik v. Hamilton Manufacturing Co.*, cited.

(Before CLIFFORD, J., District of Rhode Island, October, 1878.)

Suit was brought by the assignees of patent No. 50,318, granted to Marcus Brown Westhead, October 3d, 1865.

The object of the invention was stated to be to make up tapes and ribbons and thread for use, in such a manner that the consumer might be able to unwind or rewind them, and

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retain the coils in a compact form, and the claim of the patent was for ; " The application of an elastic slip or drag for the purposes above set forth."

CLIFFORD, J.

Redress for infringement may be sought by the owner of a patent in an action at law or by a suit in equity, and the party charged in an action at law may plead the general issue, and having given notice in writing to the plaintiff or his attorney thirty days before, may prove, as a matter of defence, that the invention had been patented or described in some printed publication prior to the supposed invention of the plaintiff. Like defences may also be pleaded in a suit in equity for relief against an alleged infringement, and proofs of the same may be given upon like notice in the answer of the respondent, and with the like effect. 16 U. S. Stat. at Large, 208 ; Rev. Stats., § 4,920 ; *Seymour v. Osborne*, 11 Wall., 539.

Neither party controverts the fact that Marcus B. Westhead, of Manchester, in the Kingdom of Great Britain, received a patent in that country as the inventor of an " improved device for arranging tapes, ribbons, and threads for use," nor that he subsequently, on the 3d of October, 1865, took out a patent, in due form, in this country for the same invention. By virtue of the last-named patent, the patentee became, as the complainants allege, the true and lawful owner of the invention, and that he on the 25th of June, 1877, assigned and conveyed all right, title, and interest in the same to one of the complainants, from whom the other two acquired each a one-third interest in common with the original assignee. They charge infringement, and service having been made, the respondents appeared and filed an answer setting up the following defences : 1. That the patentee is not the original and first inventor of the improvement embodied in the patent described in the bill of complaint. 2. That the alleged invention, prior to the patent granted for the same, was fully described in the provisional specification of one Henry Masters, and was known to and used by divers persons, whose names, residences, and the places where such

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knowledge and use were had are not known to the respondents. 3. That the invention, six months and more prior to the date of the patent, had been patented to the same party in a foreign country, limited to the term of fourteen years, and that the foreign patent had expired previous to the assignment, in consequence of which the patent was null and void. 4. They deny that they have infringed the complainant's patent, but admit that they have been engaged in putting up braids in rolls, and selling the same under the certain patent therein mentioned, and they deny that the same contains the alleged invention of the assignor of the complainants.

Before giving a detailed description of the devices, the patentee states that the object of the invention is to make up tapes, ribbons, and other narrow fabrics or thread in such a manner that the consumer may be able to unwind or rewind them and retain the coils in a compact form. Two methods by which the invention may be carried into effect are shown in the drawings. Figures 1 and 2 represent in different forms a coil of tape or ribbon, with the patented improvement applied by means of a block of wood or other suitable material, upon which the tape or ribbon is wound in the usual manner. Through a central hole in the block a strip of rubber is passed which is threaded through a roller, the ends of the strip being then united. Rollers of the kind may be constructed of glass or other suitable material, which is an essential device in the apparatus, to which must be added the elastic band, the function of which is to draw the roller downward upon the coils of tape or ribbon, and to act as a clip to bind the one upon the other. Brief description is also given of the mode of operation, the statement being that the coil may be held in one hand and the end drawn with the other until the desired quantity is unwound, the described clip acting as a drag without any disturbance of the coils, being aided by the elastic band which constitutes side-guides for keeping the coils laterally in their places. If a greater length is drawn off than is required it may be readily wound up again in a compact form by holding the roller in one hand and turning round the coil of tape or ribbon with the other. Single coils of the kind may be

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combined together, of the same or different widths, or otherwise varying in character, each of which, as the patentee states, may be drawn without disturbance of the complete coils. What he claims is, the application of an elastic clip or drag, for the purposes set forth, which is equivalent to a claim for the described apparatus or the combined devices of which the apparatus is composed, though the patentee states expressly that he does not limit himself to the precise arrangement shown and described.

Power to grant letters patent is conferred by law upon the Commissioner, and when that power has been lawfully exercised and a patent has been duly granted, it is of itself *prima facie* evidence that the patentee is the original and first inventor of that which is therein described and secured to him as his invention. Availing themselves of that rule of law, the complainants in this case introduced in evidence the patent described in the bill of complaint, which is sufficient to entitle them to a decree, unless the defences, or some one of them, set up by the respondents, can be sustained.

Two propositions of law applicable to the case may be regarded as settled, which require no discussion: I. That the burden of proof is upon the respondents to show that the assignor of the complainants is not the original and first inventor of the improvement described and claimed in his letters patent: II. That the burden of proof to sustain the charge of infringement is upon the complainants.

First. Guided by the first of those rules, the court will proceed to the examination of the defences which involve the validity of the complainants' patent. Support to the first defence, that the assignor of the complainants is not the original and first inventor of the improvement, is attempted to be derived from the publication of the English provisional protection to Henry Masters. But it is evident that the publication in question does not sustain the proposition. Westhead's English patent is dated June 13th, 1863, was sealed December 8th, 1863, and the complete specification was filed December 12th, in the same year. His application for a patent in this country was filed July 15th, 1865, and his patent for the same invention as that patented in England was

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granted on the 3d of October following. Master's English provisional specification, never patented, was introduced in evidence by the respondents as superseding both the American and the English patent granted to Westhead.

By the record it appears that that provisional specification, though filed the 24th of February, 1863, was never patented, and was never published until the 17th of the following October. Nothing is proved to show why it never went to a patent beyond what appears on its face. It may have been because its statements were inaccurate, or because they were incomplete, or because the apparatus described was inoperative, not new or useful, or not the proper subject of a patent.

Second. Grave doubts are entertained whether such a publication, without more, is sufficient to show that the patentee of an American patent is not the original and first inventor of the improvement described in his patent, but it is not necessary to decide that question, for the reasons which will presently appear. Patented inventions cannot be superseded by the mere production of a foreign publication of the kind, though of prior date, unless the description and drawings contain and exhibit a substantial representation of the patented improvement, in such full, clear, and exact terms as to enable any person skilled in the art or science to which it appertains to make, construct, and practice the invention to the same practical extent as they would be enabled to do if the information was derived from a prior patent. Mere vague and general representations will not support such a defence, as the knowledge supposed to be derived from the publication must be sufficient to enable those skilled in the art or science to understand the nature and operation of the mechanism, and to carry the invention into operation. *Seymour v. Osborne*, 11 Wall., 555; *Judson v. Cope*. 1 Fisher, 615. Apply that rule to the case before the court, and it is clear that the publication in question is not sufficient to support the defence set up in the answer.

In the outset he describes his invention as "improvements in spools, bobbins, rollers and similars," and states that it consists in the construction of spools, bobbins or rollers with

springs, plates, clips, or pins for the retention of the material wound on the spool or bobbin. Express reference is made in the specification to the drawings, from which it appears that every one of the spools is furnished with flanges, which limit the quantity of material which can be wound on the spool ; nor is there any suggestion, either in the specification or drawings, that the patentee can dispense with the flanges. Unaccompanied, as the provisional specification in this case is, by any claim showing in precise terms what the party supposed he had invented, it is difficult to define the true nature of the same ; but it is clear, both from what is written and from the drawings, that the description is not sufficient to bring it within the rules prescribed by the court in the case to which reference has already been made. *Howe v. Morton*, 1 Fisher, 597. Provisional specifications in the British system seldom or never become the basis of a patent, the party being required within six months from filing the same to file a completed specification, the rule being that the party within that period may make such alterations as he sees fit in his provisional specification, even by adding a supplementary improvement. *Clark Co. v. Copeland*, 2 Fisher, 221.

Third. Suppose that is so, still it is insisted by the respondents that the patent is null and void because the invention was first patented to the assignor of the complainants in England for the term of fourteen years, which term expired before the title was acquired by the complainants by virtue of the alleged assignment. Section 6 of the act of March 3d, 1839, provides that no person shall be debarred from receiving a patent for any invention or discovery * * * by reason of the same having been patented in a foreign country more than six months prior to his application * * * provided that in all cases such patent shall be limited to the term of fourteen years from the date of publication of such foreign patent. 5 U. S. Stat. at Large, 354, § 6. Congress on the 2d of March, 1861, enacted that all patents hereafter granted shall remain in force for the term of seventeen years from the date of the issue, and all extension of such patents is hereby prohibited. Pursuant to that act of Congress the patent in this case was granted to the assignor of the com-

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plainants for the term of seventeen years from the 3d of October, 1865, without any limitation whatever. 12 Id., 249. Since then, to wit, July 8th, 1870, Congress has provided to the effect that patents here, previously patented in a foreign country, shall expire at the same time with the foreign patent, or, if there be more than one, at the same time with the one having the shortest term; but in no case shall it be in force more than seventeen years. 16 Id., 201; Rev. Stats., § 4,887. Granted, as the patent in this case was, under the act of the 2d of March, 1861, it is clear that it is valid, and that it will remain in force for the term of seventeen years from the time it was granted. *Weston v. White*, 13 Blatchf., 364; *Badische Anilin v. Hamilton Mfg. Company*, 13 Off. Gaz., 273. Much discussion of the question of infringement will be unnecessary, as the respondents admit that they have been engaged in putting up and selling rolls of braid under the patent described in the answer.

Decree for complainants for an injunction, and for an account.

Benjamin F. Thurston, for the complainants.

Edwin Aldrich and *Oscar Lapham*, for the defendants.

MARCUS C. ISAACS

vs.

ADDISON W. ABRAMS. IN EQUITY.

A change in the form of a machine or instrument, though slight, if it works a successful result, not before accomplished in a similar way in the art to which it is applied or in any other, is patentable.

Letters patent No. 180,717, granted to Marcus C. Isaacs, August 8th, 1876, for an improvement in railway-track brooms, *held* valid.

(Before CLIFFORD and LOWELL, JJ., District of Massachusetts, October, 1878.)

LOWELL, J.

In August, 1876, the complainant obtained a patent, No. 180,717, for an improvement in railway-track brooms. He

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declares in his specification that, "heretofore, brushes for cleaning railroad-tracks, have been made with a broom of even face—that is, the brush of the broom, of whatever material made, has been of uniform length." He describes his improvement to consist of making the brush of unequal lengths ; one part adapted to brushing the surface of the rail, and the other and longer part to clearing either side of the rail, according to its construction. The claim is for : "A railway track broom, constructed with a brush of uneven face—that is, one portion of the brush longer than the other, substantially as and for the purpose set forth."

The defendant has argued that brushes with a uniform surface being well known, no invention was required to construct one with an uneven surface. We cannot take this view of the case. It is not invention to change one well known material for another, or to apply a well known process, without some adaptation, more than every skilled mechanic could apply, to a new art or subject ; but a change in the form of a machine or instrument, though slight, if it works a successful result, not before accomplished in a similar way in the art to which it is applied, or in any other, is patentable. There is evidence that this improvement did accomplish such a result, and that it was accepted and adopted by the trade, and went into general use.

The question of fact is, whether the patentee was the first inventor of this improvement. He carries his invention back, by a fair preponderance of proof, to October, 1874. The defendant alleges that he had made similar brooms many years before 1874, and that the plaintiff, when he did make the new kind of broom, stole it from one of the witnesses in the case. We have examined the evidence, which it would be unprofitable to recapitulate. We are satisfied, not only that the defendant has failed to rebut the presumption afforded by the patent, but that the plaintiff has proved that he was the first and true inventor of the improvement.

Interlocutory decree for the complainant.

Causten Browne and Jabez S. Holmes, for the complainant.

John S. Abbott, for the defendant.

Draper v. Wattles.

GEORGE DRAPER ET AL.

vs.

JOSEPH W. WATTLES. IN EQUITY.

Where a reissue contains nothing that might not have been claimed in the original patent, it is not for a different invention.

The mere deposit of a model in the Patent Office will not warrant an inference that the model was accompanied by an application for a patent.

Section seven of the Patent Act of March 3d, 1839, as amendatory of that of July 4th, 1836, *construed* to imply that the purchase, sale, or prior use, etc., of an invention, in order to defeat a patent, shall have been with the knowledge and consent of the inventor.

The prior sale, purchase, or use of the thing patented, necessary to defeat the patent, discussed.

Whether it is enough to prove that the inventor has sold an earlier and less perfect article, where the thing sold, although within the claim of the patent, is not the whole of the patented invention, *quære*.

(Before LOWELL, J., District of Massachusetts, October, 1878.)

LOWELL, J.

The complainants allege that the respondent infringes three patents. The first and principal patent is reissue No. 6,386, granted in 1875, the original being No. 89,025, dated in 1869, for an improvement by William T. Carroll in spinning-frames, described as an improved ring for such frames, composed of a thin cylindrical body or annulus, of substantially uniform thickness, and having races projecting from each end of the annulus.

The specification describes and illustrates the mode of constructing and using this ring. It declares that "this double ring"—that is to say a ring with a race at each end of the annulus—"can be made cheaper than can the ordinary spinning-ring with a shank to fit the ring-rail, and the weight of the double ring, as constructed, is but little in comparison

with the weight of the ordinary ring, and this saving of weight, and consequently of metal, is of importance, because it is a saving in the cost of manufacture, and the weight of the ring-rail is decreased materially."

The specification also contains the following: "The cylindrical body *c* is preferably of a length just sufficient to allow the traveller, when running on race *a* or *b*, to pass freely; and this improved ring is very light and compact."

The first and second claims are: "1. A spinning-ring composed of an annulus and two connected races, substantially as described." "2. The combination of a ring having two races with a ring-rail, and with holding devices carried by the rail, to operate in connection with the lower or unused race, and confine the ring to the rail and about the spindle-receiving passage through the rail, substantially as and for the purpose described."

For the purposes of this case infringement is admitted, or rather it is admitted that the defendant makes spinning-rings and holding devices, the former of which is exactly the ring drawn and described in the patent, and the latter are testified to be well known equivalents of the plaintiffs' holding devices.

The first objection, that the reissue is fraudulent and void upon its face, when considered with the state of the art, is not sustained, as we intimated at the argument, because the description is all in the original patent, and the reissue claims nothing which might not have been claimed in that patent.

The second and most formidable objection is, that the patentee, Carroll, invented the ring with two races in 1857, and permitted one specimen to be used for a long time at or about that year; and then he sold two sets of such rings in 1866, about six months more than two years before he applied for his patent, which they say is June, 1868.

The evidence tends to show that the inventor did make two rings like Exhibit D more than ten years before June, 1868, and that one of them was probably used as alleged; but whether it was used with the inventor's consent is very doubtful, and, at this distance of time, difficult to prove or disprove. He denies that he either consented to or knew of the use. It seems to us to be proved by a preponderance of

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the evidence that Carroll sold two sets of double-raced rings early in 1866, and that they were like Exhibits D and F, one or both. He swears that he made the sale in order to discover how the rings would wear in use. The complainants argue that they can carry back the application by evidence that the patentee employed a solicitor, who filed a model in the Patent Office at a certain time; but, in the absence of evidence of anything beyond this, we cannot infer that the model was accompanied by an application. That the use was experimental is sworn to by the inventor, and there is ground for saying that an invention of this sort can be best tested by actual use in a mill; therefore, if the inventor does not happen to own a mill, he must make use of that of another person.

In the recent case of *The City of Elizabeth v. The Nicholson Pavement Co.*, not yet reported, the Supreme Court held that if the use was fairly and honestly experimental, and publicity was essential to the experiment, it would not vitiate the use; and it was said in that case that the inventor might properly enough take payment for the use. Still it is somewhat difficult for a court to qualify, by a supposed intention, not declared at the time, the act of an inventor who sells the patented article on two occasions, apparently in the ordinary course of trade.

The next point taken by the complainants we consider to be sound. The ring which Carroll sold was not the completed and most perfect form of his invention. We think it very doubtful whether in that form the ring would have gone into general use, and that the last and patented article would not be a patentable improvement upon it. The law, at the date of the patent, made it essential to its validity that the improvement should not have been in public use or on sale for more than two years, with the consent and allowance of the inventor. Stat. July 4, 1836, §§ 6, 7, and 15; 5 U. S. Stat. at Large, 119, 123; and Stat. March 3, 1839, §§ 6 and 7; 5 U. S. Stat. at Large, 354. This last section provides that every person or corporation who has, or shall have, purchased or constructed any newly invented machine, etc., prior to the application by the inventor or

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discoverer for a patent, shall be held to possess the right to use, and vend to others to be used, the specific machine, etc., so made or purchased, without liability therefor to the inventor or any other person interested in the invention; and that no patent shall be held to be invalid by reason of such purchase, sale, or use prior to the application for a patent as aforesaid, except on proof of abandonment of such invention to the public, or that such purchase, sale, or prior use has been for more than two years prior to such application for a patent. There is nothing in this section requiring that the sale or use shall be with the consent or allowance of the inventor; but, as that qualification is found in all three of the sections of the act of 1836, to which this is an amendment, and is reasonable, it has always been understood to apply to the sale or use mentioned in this section. The sale or use, to defeat the patent, must have been of the thing patented; and we are of opinion that, in order to defeat the patent, it is not enough to prove that the inventor has sold an earlier and less perfect article—that is, less perfect in the sense of the patent law, even if the thing sold would be within the claim of the patent. In other words, the test is not, necessarily, whether the article sold would infringe the invention by embodying a part of it, but whether it is the invention—that is, embodies the whole of it. The law does not intend to say that a patentee dedicates to the public whatever he sells more than two years before he applies for a patent, but that he dedicates his invention if he sells it for that period.

Of course a mere formal or colorable change to escape the consequences of his own acts would not protect him; nor could he enjoin the use of any specific thing which he had sold; but we are unprepared to say that he might not prevent the general public from using the same sort of thing, if it is included in his new and completed machine or other invention. In this case it is not necessary to decide the full scope of this suggested argument, because the defendant makes the ring which is patented, and which we consider patentable, notwithstanding Exhibit D, if that be considered as dedicated to the public.

The next patent is that of Knight, No. 108,270, for the

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holder or supporter of a spinning-ring, with its peripheral cuts arranged obliquely to the circumference of the supporter, and relatively to the motion of the traveller, as described. A good deal of evidence has been taken touching the utility and mode of operation of this invention, and on the question of infringement. The defendant makes holders with cuts at a different angle from those shown in the patent and drawings. They, however, come within the description and claim, and we think they were intended to operate, and that they do operate, to produce a like result, and do infringe.

The third patent is that to Marsh, No. 118,622, for the cut or kerfed and rabbeted ring-supporter, where the rabbet is cut under or dovetailed, as described. The principal part of the evidence as to this patent has been concerning infringement. With magnifying glasses and calipers, and other proper contrivances, some witnesses find that the defendant's supporters are cut under, and others that they are not. We think the evidence of infringement brings the case to too fine a point, and within the range of those minute things which defy the judgment of a court.

Interlocutory decree for the complainants on two of the patents, reissue No. 6,386, and No. 108,270.

Chauncey Smith and Thomas L. Livermore, for the complainants.

Thomas L. Wakefield and D. Hall Rice, for the defendant.

JOHN KENDRICK

vs.

THOMAS A. EMMONS. IN EQUITY.

Where the defendant rendered before the master an account of the number of machines which he had made, some of which he represented as infringing three claims of the patent, and others only one claim, and complainant proved a royalty for the use of machines similar to those employed by the defendant, and defendant admitted in writing "the license and the terms of the same as alleged" by the complainant, and then offered to verify the statement of his account that a large part of his machines infringed only one of the three claims, and the master held this evidence to be inadmissible, and assessed the damages for all the machines at the usual rate, to which ruling the defendant excepted: *Held*, that such exception must be overruled.

Whether, where a royalty had been established, there can be, on an accounting, any legal ground for distinction between the damages to be recovered for the infringement of a greater or of a less number of claims of the patent, *quære*.

(Before LOWELL, J., District of Massachusetts, October, 1878.)

LOWELL, J.

This case turns on a very narrow point. The interlocutory decree adjudged that the defendant infringed the third, fourth, and eighth claims of the plaintiff's patent, and referred to a master the assessment of damages.

Before the master the defendant rendered an account of the number of machines which he had made, some of which he represented as infringing the three claims above mentioned, and others only the eighth claim. The complainant then alleged that he had "for many years, to the knowledge of the defendant, exacted and received from many other persons a royalty of two and a half mills upon all harness manufactured by the use of machines similar to those employed by the defendant," who thereupon admitted in writ-

Kendrick v. Emmons.

ing, "the license and the terms of the same as alleged" by the plaintiff. Here the plaintiff rested his case. The respondent then offered to verify the statement of his account that a large part of his machines infringed only one of the three claims mentioned in the original decree. The master held this evidence to be inadmissible, and assessed damages for all the machines at the usual rate. The defendant excepted to the exclusion of the evidence, and to the assessment.

We think it clear that the master was right. There was no offer to prove that the plaintiff was accustomed to divide his royalty according to the greater or less amount of infringement, nor that any possible basis of computation could be found by which the master could assess the value of different claims, and we are not aware of any legal ground for such a distinction; but, without deciding this point, the evidence as it stood justified and required the master to find that, for precisely such an infringement as was admitted here, precisely this royalty had been usually demanded and paid. There was no allegation of misunderstanding, or surprise; no request for leave to withdraw or qualify the admission, and nothing of that sort has been suggested in the argument to us; and upon the written statements of the parties themselves the assessment is legal and just, and is affirmed.

Decree accordingly.

B. F. Thurston and W. W. Swan, for the complainant.

A. K. P. Joy and J. E. Maynadier, for the defendants.

FREDERIC HOLBROOK, TRUSTEE, ET AL.

vs.

JOSIAH B. SMALL.

SAME

vs.

ELBRIDGE G. MATTHEWS ET AL. IN EQUITY.

In an accounting, no part of the expenses of the litigation should be assessed as damages, nor is interest to be added to the profits, except under peculiar circumstances.

The power conferred upon a Court of Equity, by section 4,921 of the Revised Statutes, to treble the *damages* in a suit for infringement, does not authorize the court to treble the amount of *profits*.

Where the clerk of the court taxed the costs in an equitable mode and by consent of both parties, neither party should be permitted to withdraw his consent upon the coming in of the master's report.

(Before LOWELL, J., District of Massachusetts, October, 1878.)

LOWELL, J.

In each of these cases the first decree of the court found that one claim of one of the two patents relied on by the plaintiffs was void for want of novelty, and sustained certain other claims, and found infringement of these claims on the part of the defendants.

The master, in each case, has assessed the profits made by the defendants by the use of the inventions held to be valid, but has found no damages as distinct from profits.

The complainants object that some part of the expenses of the litigation should be assessed as damages, and that interest should be assessed on the profits. Expenses of suit are never

Holbrook v. Small.

allowed. *Philp v. Nock*, 17 Wall., 460. Interest may sometimes be added to the profits, but only under peculiar circumstances, which the master does not find in this case. *Mowry v. Whitney*, 14 Wall., 620; *Littlefield v. Perry*, 21 Wall., 205.

The complainants ask that the court will treble the damages, under the power given in section 55 of the Statute of 1870 (now Revised Statutes, section 4,921); but it seems clear that the law contrasts profits and damages throughout that and the preceding sections, and that the power to treble the damages does not extend to profits in a suit in equity. It is true that under some circumstances a jury may consider the profits in ascertaining the damages when no better means are at hand, and so it may incidentally happen that in increasing the damages the court is adding to the profits; but profits are never, of themselves, the measure of damages at law. And in the section cited the court may increase damages as distinguished from profits. The increase is never to exceed three times the amount of the verdict (Revised Statutes, section 4,919), and the verdict is to be for the actual damages. The master finds that there were no actual damages in either of these cases; and it is impossible for the court to make a substantial verdict by multiplying nothing by three or less.

In respect to costs, the law is that, if by mistake the patentee claims to have invented some substantial part of the thing patented, of which he was not the original and first inventor, and that part is distinguishable from the rest, and the good part has been infringed, he may recover damages for such infringement, but no costs. Rev. Stats., Sec. 4,922. In each of these cases the clerk, by consent of parties, taxed costs for the plaintiffs and deducted from the gross taxation so much of the expense as he found had been caused by taking evidence on the claim afterward declared by the court to be void. The plaintiffs contend that the above-cited section of the statute does not apply to these cases because they have prevailed on two patents, one of which was wholly valid. The defendants contend that, by appealing to the court, the plaintiffs have renounced the agreement, and that the law deprives them of costs altogether. The clerk has taxed the

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costs in an equitable mode, and by consent ; and I see no reason for permitting either party to withdraw the consent.

Master's report and clerk's taxation, in each case, affirmed.

John Hillis, for the complainants.

Thomas L. Livermore, for the defendants.

THE UNITED NICKEL COMPANY

vs.

GEORGE J. HARRIS ET AL. IN EQUITY.*

The letters patent granted to Isaac Adams, Jr., August 3d, 1869, for an "improvement in the electro-deposition of nickel," are valid, the first, third and fourth claims of the patent being : "1. The electro-deposition of nickel by means of a solution of the double sulphate of nickel and ammonia, or a solution of the double chloride of nickel and ammonium, prepared and used in such a manner as to be free from the presence of potash, soda, alumina, lime or nitric acid, or from any acid or alkaline reaction. 3. The methods herein described, for preparing the solution of the double sulphate of nickel and ammonia, and the double chloride of nickel and ammonium. 4. The electro-plating of metals with a coating of compact, coherent, tenacious, flexible nickel, of sufficient thickness to protect the metal upon which the deposit is made from the action of corrosive agents with which the article may be brought in contact."

The first claim is a claim to the electro-deposition of nickel by means of any solution of the double sulphate of nickel and ammonia, or of any solution of the double chloride of nickel and ammonium, however such solution may be prepared, provided such solution is so used as to be free, while the electro-deposition of the nickel is going on, from the presence of potash, soda, alumina, lime or nitric acid, or from any acid or alkaline reaction.

Although a sulphate or a chloride of potash or soda may be introduced into a solution of the double sulphate of nickel and ammonia, or into a solution of the double chloride of nickel and ammonium, yet, if the solution is so used, in the electro-deposition of nickel, that the sulphate or the chloride will not be decomposed, the first claim is infringed.

* 15 Blatchf. C. C. R., 319.

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The fourth claim is a claim to the product or coating named in it, having the qualities described in it, when such product or coating is produced by employing the invention covered by the first claim.

(Before BLATCHFORD, J., Southern District of New York, October, 1878.)

BLATCHFORD, J.

This suit is brought on two patents granted to Isaac Adams, Jr., one on the 3d of August, 1869, and the other on the 10th of May, 1870, each for an "improvement in the electro-deposition of nickel." In the proofs, no evidence is given as to any infringement of the patent of 1870. The case rests on the patent of 1869 alone. The specification says : " It has long been well known that nickel possesses certain qualities which would render it of great value in the arts, if it could be readily and surely deposited by the battery in such a manner as to make those qualities available. These qualities are, first, its infusibility ; second, its color, which is nearly that of silver ; third, its hardness, which is nearly equal to that of steel, and by reason of which it resists wear and abrasion to a much greater degree than silver ; fourth, its power of resisting oxidation and the tarnishing and corrosive effects of many gases and liquids. The two last named qualities render it, for many purposes, greatly superior to silver, which it much resembles in appearance, for electro-plating other metals, and for making articles of solid metal. To these advantages should be added its cheapness, as compared with silver. It has long been known that nickel could be deposited from certain solutions by electricity, but the character of the deposits has been such that the valuable qualities of the metal could not be secured to such an extent as to render it practically useful for general purposes. The difficulties in the way of its deposition have arisen mainly from the character of the solutions employed, and the nature of the nickel used for anodes in the depositing cell. I have discovered the causes of certain difficulties in the practical deposition of this metal, and am able to remove them, and to point out methods of preparing solutions, and the conditions which they must satisfy, and under which they must be used, so that solid, coherent, tenacious, and flexible nickel

can be deposited to any desired amount. I can thus render the electro-deposition of nickel practically valuable, not only for electroplating other metals, but for that branch of the art of electro-deposition known as electrotyping, that is, the deposition of nickel upon a surface, not to remain upon it as a permanent coating, but to be removed and used independently of it. My improvements relate, first, to the method of preparing certain solutions from which the nickel is to be deposited, and to the properties and conditions which such solutions must possess; second, to a method of preparing nickel plates for the anodes of the depositing cell; third, to the character of the deposits obtained. In order to explain fully the nature of my invention, it is necessary to refer to certain facts relating to the electro-deposition of metals generally, which have been long known. It is well known that metals are deposited in three conditions, viz., first, as a black powder; second, in a state called reguline metal, that is, in a condition which exhibits the ordinary qualities of the metal; third, in a hard, crystalline condition. For most purposes in the arts, it is necessary that the metals should be deposited in the reguline state, the applications which are made of the powdery or crystalline deposits being very few. There are two applications of the art of electro-deposition which are usually recognized as two distinct branches of the art, and which embrace nearly all its practical uses. One is called electro-plating, and consists in depositing a coating of one metal upon another metal, to remain upon it as a permanent coating. The other application is called electrotyping, and consists in depositing one metal upon another, or upon a prepared surface of some other substance, from which it is to be removed, to be used separately from the surface upon which the deposit is made. For each of these purposes the metal must be deposited in the reguline state. It has long been known that the metals differ greatly in the facility with which they can be deposited by the electric current, especially in the reguline form. So, also, different solutions of the same metal differ greatly in respect to the deposits which may be obtained from them. With some solutions it is difficult, if not impossible, to obtain a deposit of reguline

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metal under any circumstances. The difficulty seems, in some cases, to be inherent in the character of the solution itself. In other cases, it is due to the presence of foreign elements, or to the density or temperature of the solution, or to the density of the current employed. Different solutions also differ greatly in the amount of metal which can be deposited with a given strength of current. Some solutions give a deposit of metal which is the full chemical equivalent of the electricity passing through the solution, while others fall far below it. Solutions also differ within wide limits in respect to the intensity and density of the current required to give a reguline deposit. The differences in solutions, in these respects, are of great importance with reference to the cost of depositing the metals. The higher the intensity required to effect the deposition of the metal, the greater the cost; and it is obvious that the cost of the deposit will increase in proportion as it falls short of the full amount due to the electricity passing through the solution. Another circumstance is of great importance in the depositing of metals. It often happens that a thin film may be obtained of one metal upon another, but that the process of deposition cannot be carried on to such an extent as to obtain a coating of any appreciable thickness. As soon as the metal to be coated has received a mere film, the conditions are so changed that the deposit is practically stopped. A characteristic of this filmy deposit is, that, though the particles of the metal adhere separately to the metal on which the deposit is made, the deposit is so thin that the particles of the deposit have no such coherence among themselves as will allow the deposit to be removed from the surface on which it is deposited, nor will such a deposit afford any substantial protection against abrasion or the ordinary wear to which most plated articles are subjected, nor to the action of corrosive agents. It is obvious, therefore, that it is impossible to make electrotype plates from such deposits, and that such deposits are practically useless for most purposes to which electro-plating is applied. Although it has long been known that nickel could be deposited to some extent from various solutions, yet I believe, that, prior to my improvements, it has not been practicable to

obtain deposits of such character and thickness as are required for electrotyping or even for most of the purposes of electro-plating. The solutions from which nickel has been heretofore most successfully deposited, are, I believe, the chloride of nickel, the cyanide of nickel and potassium, the double sulphate of nickel and ammonia, and the double chloride of nickel and ammonium. Of these solutions, as heretofore prepared, I believe the chloride is the best, but the deposits obtained from it are very far from what is required for the general purposes to which the electro-deposition of this metal may be applied." The specification then points out the difficulties attendant and consequent in the use of the chloride of nickel and of the cyanide of nickel and potassium. It then proceeds: "Neither of these solutions, so far as I have seen them used, gives, for any great length of time, the full equivalent of metal for the electricity employed; and, so far as I have been able to discover, these two solutions are inherently incapable of giving a coherent, tenacious, flexible metal, such as is required in the arts of electrotyping and electro-plating. Of the other two solutions named, I believe that, before my improvements, the best results were obtained from the double chloride of nickel and ammonium. But the metal deposited from it is of such a character as to be worthless when deposited to any appreciable thickness. It is accompanied with the deposit of the peroxide, and is, therefore, black or brown. It is extremely liable to split up into thin scales, which may be rubbed off even with the hand. This want of coherence and tenacity unfits it for the requirements of the arts. The metal deposited from the double sulphate of nickel and ammonia is substantially the same as the above, but it is not so easily obtained. If, with these solutions, a battery power is used of an intensity of two Grove cells or thereabouts, a white deposit may be obtained of considerable thickness, but still with such a tendency to split up in scales, that it is practically useless; and neither solution gives the full equivalent due to the current. I have discovered, however, that the difficulties attending the use of these last named solutions and the character of their deposits are not inherent in the nature of the solutions, but are due to

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the modes of preparing them, or to the presence, in minute quantities, of certain substances which are generally, and, I believe, universally employed in making them, or in the reduction of the nickel used in making them. In order, therefore, to prepare these solutions in such a manner as to give the results I have reached, it is necessary to adopt processes in their preparation and observe precautions, which shall either dispense with the use of the substances altogether, or shall effectually remove them if they are employed, and which are wholly unnecessary in their preparation for any other use with which I am acquainted. In preparing my solution, I prefer to use pure nickel, but commercial nickel may be used. Commercial nickel almost always contains more or less of the re-agents employed in the purification or manufacture of the metal, such as sulphate of lime, sulphide of calcium, sulphide of sodium or potassium, chloride of sodium and alumina. When any of these substances are present, it is necessary to remove them." The specification then describes how this may be done, and also how zinc, copper, arsenic and antimony can be removed from the nickel. It then describes the patentee's method of preparing the double sulphate of nickel and ammonia, by first preparing a solution of the sulphate of nickel, and then a solution of the sulphate of ammonia, and then uniting the two and diluting the mixture with sufficient water to leave one and half to two ounces of nickel to each gallon of solution. Specific directions are given how to prepare the solution of the sulphate of nickel, and how to prepare the solution of the sulphate of ammonia. The patentee's mode of preparing the solution of the double chloride of nickel and ammonium is then described. It is then stated that another important part of the patentee's invention is the preparation of the nickel plates to be used as anodes in the depositing cells: This consists in preparing an anode of nickel combined with iron, to prevent the copper and arsenic which are present in almost all commercial nickel from being deposited with the nickel, or injuring the solution. It is further set forth, that, when copper and zinc are present to any considerable extent in nickel, it may be melted in a crucible and cast into plates

for anodes, and a mode of doing this is described ; and that " it is necessary to melt commercial nickel, not only to cast it into plates for anodes and combine it with iron, when copper and arsenic are present, but to remove any potash, soda, lime or alumina left adhering to it in the process of reduction, these substances being removed, as before stated, as slag." One of the methods before described in the specification, for purifying commercial nickel for use in making the patentee's solutions, so as to remove the re-agents before mentioned, was to melt the nickel, whereby " the foreign substances collect on the top of the melted nickel in the form of a slag." The specification proceeds : " Having prepared the solutions and anodes, as herein described, nickel may be readily deposited, but, in order to carry on the deposition continuously, it is necessary to observe certain precautions : First, the use of a battery of too high an intensity must be avoided. An intensity of two Smee cells is sufficient. A high intensity decomposes the solution and liberates free ammonia, thus rendering the solution alkaline and impairing its value. Whenever the smell of free ammonia arises from the decomposing cell, the operator may be certain that the solution is being injured. It is important that the depositing shall not be forced by the use of too strong a current. Second, it is important that great precaution should be used to prevent the introduction into the solution of even minute quantities of potash, soda or nitric acid. When an article to be coated is cleaned in acid or alkaline water, or is introduced into it for any purpose, the greatest care must be taken to remove all traces of these substances before the article is introduced to the nickel solution, as the introduction of the most minute quantities of acids or alkalis will surely be injurious. It is important that the solution be kept free from all foreign substances, but its purity from those above named is especially important. Third, the anode of the depositing cell should present a surface to the action of the solution somewhat larger than the surface upon which the deposit is being made, particularly in the double sulphate solution. The reason is, that nickel dissolves so slowly, that, if the exposed surface is not larger than the sur-

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face on which the deposit is made, the solution will not keep saturated. On the other hand, if the anode is very much larger than the positive pole, it tends to give a deposit of black powder. Fourth, if zinc is to be coated, it should first be coated with copper, as it is difficult to make nickel adhere to zinc, and there is danger that the zinc may be acted on and injure the solution. With solutions and anodes thus prepared and used, the deposition of nickel can be carried on continuously and almost as surely and certainly as the deposition of copper from the common sulphate solution, though the limits of the battery power which may be used are narrower. The metal deposited is compact, cohesive and tenacious. It may be deposited of nearly uniform thickness over any surface, however large. The deposited metal is capable of being annealed by a heat below a red heat. It then becomes flexible, malleable and ductile. The deposit may be made of any required thickness, either to furnish effectual protection to the metal on which it is deposited, or to be removed and used separately from the surface on which it may be deposited. Thus, electroplate of nickel may be produced, either as copies of irregular surfaces which it is desired to reproduce, or as plain sheets of nickel, which, after being annealed, may be rolled, hammered or spun into a variety of forms or articles. These solutions also give the full equivalent of nickel for the electricity employed. I believe deposits possessing these qualities were never produced except by means of my improvements. I therefore claim :

1. The electro-deposition of nickel by means of a solution of the double sulphate of nickel and ammonia, or a solution of the double chloride of nickel and ammonium, prepared and used in such a manner as to be free from the presence of potash, soda, alumina, lime or nitric acid, or from any acid or alkaline reaction.
2. The use, for the anode of a depositing cell, of nickel combined with iron, to prevent the copper and arsenic which may be present from being deposited with nickel or from injuring the solution.
3. The methods herein described, for preparing the solution of the double sulphate of nickel and ammonia, and the double chloride of nickel and ammonium.
4. The electro-plating of the metals with a

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coating of compact, coherent, tenacious, flexible nickel, of sufficient thickness to protect the metal upon which the deposit is made from the action of corrosive agents with which the article may be brought in contact. 5. The deposition of electrotype plates of nickel, to be removed from the surface on which the deposit is made and used separately therefrom." Only the 1st and the 4th claims of the patent are alleged to have been infringed by the defendants. The principal contest is as to the first claim.

The third claim is a claim to "the methods herein described, for preparing the solution of the double sulphate of nickel and ammonia, and the double chloride of nickel and ammonium." This is the same thing as a claim to each solution prepared by the method described for preparing each. The specification sets forth, that the solutions prepared by the methods described in it will be free from the presence of potash, soda, alumina, lime and nitric acid, and from everything which will cause an acid or an alkaline reaction. The means of securing this result, by removing from commercial nickel, when employed in making the solutions by the patentee's methods, the re-agents named in the specification, are set forth. If these re-agents are removed, and the directions given as to the removal of the other foreign substances mentioned are followed, the solutions made by the patentee's methods will be free from the presence of the injurious substances mentioned in the first claim. But, the properties and conditions mentioned in the specification as those which solutions prepared according to the patentee's methods *will* possess, are stated in the specification to be properties and conditions which *must* be possessed, not only by solutions prepared according to the patentee's methods, but by all solutions of the double sulphate of nickel and ammonia, and all solutions of the double chloride of nickel and ammonium, so far as regards freedom from the presence of the substances mentioned in the first claim; and, in respect to the use of solutions of such double sulphate and of solutions of such double chloride, it is stated, not only that the solutions prepared by the patentee's methods must be so used as to be free, in and during the operation of plating, from the presence

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of the substances mentioned in the first claim, but that all solutions of such double sulphate, and all solutions of such double chloride, by whatever method prepared, must be so used as to be free, in and during the operation of plating, from the presence of such substances. Thus, the specification states that the patentee has discovered that the difficulties which he mentions as attending the use of a solution of the double sulphate of nickel and ammonia, and the use of a solution of the double chloride of nickel and ammonium, are due to the presence of certain substances employed in making the solutions, or in reducing the nickel used in making them. It also states, substantially, that such employment of these substances results in producing solutions in which, in and through their use, the substances mentioned in the first claim will be present, while the electro-deposition of the nickel is going on. It states, also, that, in order to prepare the solutions in such manner as to give the results which the patentee has reached, the substances referred to as employed in making the solutions, or in reducing the nickel used in making them, must either not be so employed, or must be effectually removed if they are employed. These substances are enumerated as sulphate of lime, sulphide of calcium, sulphide of sodium, sulphide of potassium, chloride of sodium and alumina. But, it is also further stated, that no quantity, however minute, of potash, soda or nitric acid, or of any acid or alkali, must be allowed to be present in the solution; and then the claim states, that the solution used must be free from the presence of potash, soda, alumina, lime and nitric acid, and from everything which will produce an acid or an alkaline reaction, while the electro-deposition of nickel is going on. Lime, soda and potash are likely to be produced in the solution, while the electro-deposition is going on, if the sulphate of lime and the sulphide of sodium and the chloride of sodium and the sulphide of potassium are employed in making the solutions, or in reducing the nickel used in making them, and are not removed. So, they may be produced in using a solution, if the sulphate of lime and the sulphide of sodium and the chloride of sodium and the sulphide of potassium are introduced into the solu-

tion after it is prepared. But, if those substances are introduced into a solution, and then the solution is used under such conditions that those substances remain inert, so far as the production in the solution of free lime or free soda or free potash is concerned, and no free lime or free soda or free potash is produced, then none is present, and the solution is used in such manner as to be free from the presence of those articles. Viewed in the light of these considerations, it is manifest that the first claim is a claim to the electro-deposition of nickel by means of any solution of the double sulphate of nickel and ammonia, or of any solution of the double chloride of nickel and ammonium, however such solution may be prepared, provided such solution is so used as to be free, while the electro deposition of the nickel is going on, from the presence of potash, soda, alumina, lime or nitric acid, or from any acid or alkaline reaction. This is a valid claim, and the invention covered by it is a patentable invention, if the patentee was the first discoverer of the fact, that the difficulties in the way of securing proper results in the electro-deposition of nickel with the two solutions in question, were due to the existence or development in them, while being used, of the substances named in the claim, and if he describes methods of making such solutions which will secure the absence of such substances. A person learning, from the specification of the patent, what such difficulties are, may proceed to make the solutions by other methods than those described by the patentee and covered by the third claim; but, if he avails himself of the knowledge imparted by the specification, that he must take care to secure the absence of the substances named in the first claim, and prepares solutions which, in use, are free from those substances, and then practises the electro-deposition of nickel by means of such solutions, he infringes the first claim of the patent. So, too, a person infringes such claim, who, taking such solutions made by another person, by such other methods, practises the electro-deposition of nickel by means of them, provided he so uses such solutions, that, in use, they are free from the substances named in the first claim, and thus avails himself of such knowledge imparted by the specification.

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The patent being based on the discovery by the patentee, that the difficulties he sets forth are due to the presence, in the use of the solutions in question, in the electro-deposition of nickel, of the substances named in the first claim, the evidence shows satisfactorily, that such difficulties existed and were due to the causes assigned ; and that the patentee discovered, and was the first to discover, what such causes were. It also shows, that he invented and described practical methods of getting rid of such causes. As a consequence, he was the first person who obtained, as practical results in the electro-deposition of nickel, the results set forth in the specification as those due to the use of the invention covered by the first claim.

On the question of infringement, the defendants claim, that, if they introduce into a solution of the double sulphate of nickel and ammonia, or into a solution of the double chloride of nickel and ammonium, a sulphate or chloride of potash or soda, they do not infringe the first claim. The evidence shows, that these sulphates and chlorides may be introduced into the solutions, and that then the solutions may be so used, in the electro-deposition of nickel, that the sulphate or the chloride will not be decomposed, and there will not result, from such introduction, the presence of potash or soda, in the sense in which the word " presence " is used in the first claim. The injurious substance is inert, by being in the chemical state of a sulphate or a chloride, as inert as if it were enclosed in an impervious bottle. The defendants used solutions which were free from the substances named in the first claim, otherwise than as such solutions had in them the sulphate or the chloride of potash or soda, and, in the use of the solutions, the presence of such sulphates or chlorides had no more effect to cause free potash or soda to be present, than if such sulphates or chlorides had not been introduced. If the introduction of such sulphates or chlorides is otherwise of any benefit, their use is but an improvement, and the invention of the patentee is availed of, notwithstanding their introduction.

On the question of the novelty of the invention covered by the first claim of the patent, I am of the same opinion an-

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nounced by Judge Shepley, in his decision in the case of *The United Nickel Co. v. Anthes*, 1 Holmes, 155, in May, 1872, that, prior to the discoveries of the patentee, the electro-deposition of nickel, by means of such solutions as are described in his patent, "prepared and used in the described manner, so as to be free from foreign substances, and acid or alkaline reactions, which would interfere with the uniform, continuous, and coherent deposition of the metal, was unknown in any practical application of it to the useful art of electro-plating metals with nickel." I concur, also, on all the evidence in this case, in what was said by Judge Shepley, in his decision in the case of *The United Nickel Co. v. Keith*, 1 Holmes, 328, in February, 1874, that, prior to the discoveries of the patentee, "electro-platers and electro-metallurgists well understood how desirable a result it would be to be able to plate the surface of baser metals with a coating of nickel, resembling silver in lustre and color, without its liability to tarnish on exposure to the air," but that, after great research and investigation, it has not been shown that the electro-plating of metals with nickel had any practical existence as a useful art, accessible or beneficial to the public, before the date of the inventions of the patentee; while, on the contrary, he was the first person who effected "the uniform, continuous, and coherent deposit" of nickel upon the surface of other metals, "so as to produce a coating of the desired thickness, purity, uniformity, coherence, and permanency of adhesion." In saying this, I have not overlooked the additional evidence in this case, as to what was done by Remington, nor the Muspratt-Stohmann publication. I do not find in the evidence, on the point of novelty, anything which shows that the invention covered by the first claim of the patent, as I have construed that invention, was not new with the patentee, or existed before he made such invention.

Great stress is laid, by the defendants, on the view, that the patentee describes his own methods of preparing the solutions referred to, as the only methods by which the injurious substances named in the first claim can be excluded from the solutions; that he does not state that there are other methods than those which he describes, by which the solu-

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tions may be so prepared as, when prepared, to be free from such injurious substances ; and that he does not show how, when the solutions are used, they are to be used so as to prevent the development or presence of such injurious substances. The answer to this view is, that the patentee sets forth clearly that the substances he names in his first claim are injurious, that the solutions should be prepared by such methods as not to use what may produce such substances, or to remove what is so used, and then, that care should be taken not to introduce into the solution, after it is prepared, and while it is being used, any of the injurious substances, and not to use a battery of too high intensity. The evidence shows, that what is so not to be used in preparing the solution, or, if used, is to be removed, is something which, if decomposed, will produce the injurious substances, and that the directions of the patent, if followed, will prevent such decomposition, and the consequent production of the injurious substances, in the use of the solution in the electro-deposition of the nickel.

The proper construction of the fourth claim of the patent of 1869 is, that it is a claim to the product or coating named in it, having the qualities described in it, when such product or coating is produced by employing the invention covered by the first claim. Under this construction, the novelty of the fourth claim is not successfully attacked. As the defendants have infringed the first claim, they have also infringed the fourth claim. There must be the usual decree for the plaintiff on these two claims.

Dickerson & Beaman, for the complainant..

Frost & Coe and *Charles F. Blake*, for the defendants.

INDEX.

ABANDONED EXPERIMENTS.

See EXPERIMENTS ; ANTICIPATION ; PRIOR USE.

ABANDONMENT.

1. Abandonment is a fact and not a conclusion of law. *Sprague v. Adrianee.* 124
2. Where the evidence showed that the inventor, although allowing more than four years to elapse from the date of his invention before applying for a patent, nevertheless kept the invention from the public, and it appearing also that he was in straitened circumstances : *Held*, that, under the circumstances of the case, an abandonment was not proved. *Id.* 124
3. It is well settled that an abandonment of the use of a mechanical structure which has been perfected, and the operative merit of which has been demonstrated by trial, will enure to the benefit of the public, and not to that of an original but subsequent inventor. *Pickering v. McCullough.* 279
4. Acts of an inventor, to determine the value, utility or success of his invention, are to be liberally construed, if the acts are not inconsistent with the clear intention to hold the exclusive privilege. *Jennings v. Pierce.* 361
5. The application for the patent was filed in January, 1855, and rejected in March, 1855. In June, 1856, the inventors filed a paper stating that they withdrew their application, and requesting the return of \$20. The withdrawal was made for the purpose of filing a new application. The \$20 was refunded in June, 1856. At that time, one of the inventors directed E., a patent agent, to prepare a new specification. E. neglected to do so till April, 1857. At that time, a new specification was sworn to by both inventors and sent to E. with his fee, and the Patent Office fee, and a power of attorney to E. The application was not filed by E. till February, 1858.

 Abatement—Acquiescence.

The patent was issued in March, 1858: *Held*, that there was no abandonment of the invention to the public, and no consent to its use by the public for more than two years before February, 1858; and that there was, in judgment of law, a continuous application.

Howes v. McNeal.

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6. The principle of law, that inventors may, if they can, keep their inventions secret, and, if they do, for any length of time, they do not forfeit their right to apply for a patent unless another in the meantime has made the invention and secured by patent the exclusive right to make, use, and vend the patented product, explained.

Kelleher v. Darling.

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See ACQUIESCENCE, 1; BURDEN OF PROOF, 4; PARTICULAR PATENTS, 53.

ABATEMENT.

1. In equity, the bankruptcy of the complainant and appointment of an assignee, pending a suit on a patent, would not abate the suit, but would only necessitate the filing of a supplemental bill making the assignee a party; and the reconveyance of the patent to the complainant, pending the suit, would render such a proceeding unnecessary. *Gear v. Fitch.*

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ACCOUNT.

1. Where the proofs at the final hearing showed that there can have been no profits from the infringement, and it does not appear whether or not complainant suffered damage therefrom: *Held*, not a reason why a decree for an account should not be granted. *Bullock Printing Press Co. v. Jones.*

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See PROFITS AND DAMAGES; INFRINGER, 1; INJUNCTION, 20.

ACQUIESCENCE.

1. The question of user of an invention by the patentee or the public, as bearing upon an application for a preliminary injunction, considered. *American Middlings Purifier Co. v. Christian.*
2. When a party has used, publicly and notoriously, for any considerable length of time, a patented invention, claiming exclusive right to it, the public are presumed to have acquiesced in that claim. *Id.*

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See LACHES, 1.

Action at Law—Anticipation.

ACTION AT LAW.

1. If the invention is such that, in the nature of things, there can be no profits in the legal sense of the term, and the limit of the injury from the use of the invention must necessarily be the value of the license fee, the patentee has a complete remedy at law. *Vaughan v. Central Pacific R. R. Co.* 27
 See DISCOVERY, 1 ; ELECTION OF REMEDIES, 1.

ACTION OF PATENT OFFICE.

See BURDEN OF PROOF, 1, 2 ; ESTOPPEL, 5, 6 ; EVIDENCE, 7 ; FRAUD, 1 ; INJUNCTION, 8, 9, 11 ; NEW MATTER, 4 ; PRESUMPTION, 2 ; REISSUE, 6 ; REJECTED APPLICATION, 1.

ADMINISTRATORS.

See EXECUTORS AND ADMINISTRATORS.

AGENT.

See ATTORNEY IN FACT, 1 ; CORPORATION, 1 ; VIOLATION OF INJUNCTION, 2.

AGGREGATION.

See PARTICULAR PATENTS, 36, 93, 120.

ANTICIPATION.

1. A change of location of a part, in combination, where there is no new function performed by the changed member in its new location, will not evade a patent. Nor will the fact that the part changed works better in the location where the defendant puts it, than where complainant put it, if it does the same work, but only in degree better, make any difference. The result is the same. *Adams v. Joliet Mfg. Co.* 1
2. It is a well-settled principle of patent law, that the mere suggestion that a given result may be obtained, is not patentable, and does not anticipate a patent by another, but a mechanism or device must be described by which the suggested result is obtained. *Graham v. Gammon.* 7
3. Where a patent is for mechanism by which a particular result is produced, a prior patent, in order to anticipate it, must contain

 Answer—Application.

- more than a mere statement that the result may be accomplished ; it must contain a description of the mechanism by which it is accomplished. *Id.* 7
4. Where an inventor patents a device, and subsequently obtains another patent for some of the previously patented parts of such device, the second patent is anticipated by the antecedent patented device. *Stow v. City of Chicago.* 83
5. A prior patent which describes and claims mechanism by which a certain result is produced, will not anticipate a subsequent patent for different means by which the same result is attained. *Hamilton v. Rollins.* 157
6. Illustrated drawings of conceived ideas do not constitute an invention, and unless they are followed up by a reasonable observance of the requirements of the patent laws, they can have no effect upon a subsequently granted patent to another. *Draper v. Potomska Mills Corporation.* 214
7. Mere applications for patents cannot be considered on the question of novelty, as a defence in a suit on a patent. To make the things described and shown in them available, there must be evidence that such things were actually constructed in working form. *Barker v. Stowe.* 337
8. A rejected application for a patent is, of itself, no evidence of the existence of a perfected invention at the date it was filed, in the absence of any other evidence of the construction and operation at that date of a machine embodying the invention described in such application. *Howes v. McNeal.* 376
9. Where prior patentees approach very near to the discovery of the complainant, but do not discover the principal feature of his invention, and are not able to give any directions by which the same can be successfully prepared and applied, the patent is not anticipated. *Cahill v. Brown.* 580

See ABANDONMENT, 3, 6 ; EQUIVALENTS, 1 ; INFRINGEMENT, 9 ; ORIGINALITY, 1 ; PARTICULAR PATENTS, 12, 19, 22, 43, 63, 74, 75, 77, 78, 86, 99, 111, 112, 116 ; PATENTABILITY, 2, 9, 11, 12 ; PRESUMPTION, 3 ; PRIOR KNOWLEDGE, 1 ; PRIOR PUBLICATION, 1, 2, 3, 4 ; PRIOR USE, 1 ; REJECTED APPLICATION, 1 ; UTILITY, 2.

ANSWER.

See EVIDENCE, 9 ; PLEADING, 3 ; PRACTICE, 9, 10.

APPLICATION.

1. The mere deposit of a model in the Patent Office will not warrant

Article of Manufacture—Bill in Equity.

an inference that the model was accompanied by an application for a patent. *Draper v. Wattles*. 618

See ANTICIPATION, 7; LACHES, 2; PRACTICE, 6, 7, 8; REJECTED APPLICATION.

ARTICLE OF MANUFACTURE.

See NEW MATTER, 2; PARTICULAR PATENTS, 25, 34; PATENTABILITY, 10.

ASSIGNEE.

See ESTOPPEL, 1.

ASSIGNMENT.

See ABATEMENT, 1; CONSTRUCTION OF CONTRACT, 1; INFRINGEMENT, 1; LICENSE, 6; PATENT RIGHTS, 2.

ASSIGNMENT OF CHOSE IN ACTION.

1. In assigning a right in action after the suit has been commenced, the person to be notified is he against whom the action is pending, so that he may not pay the wrong person. *Gear v. Fitch*. 573

See DAMAGES, 1, 2; RECORDING ASSIGNMENT, 1.

ATTACHMENT.

See PRACTICE, 11; VIOLATION OF INJUNCTION, 3.

ATTORNEY IN FACT.

1. The presumption is that a sale of letters patent puts an end to powers of attorney relating thereto previously executed; but if such a power of attorney is allowed to remain outstanding, and third parties deal with the attorney on the supposition that it is still in force, they will be protected as against the owner of the patent, for, if one trusts an agent, and in consequence thereof, another suffers, the party conferring the agency must bear the loss. *Labaree v. Peoria, Pekin and Jacksonville R. R. Co.* 180

BILL IN EQUITY.

See PRACTICE, 4.

 Burden of Proof—Combination.

BURDEN OF PROOF.

1. The proceedings before the Patent Office, between the same parties, cast on the defendants the burden of showing the determination of the Commissioner to have been manifestly wrong. *Pentlarge v. Beeston*. 142
2. The action of the Patent Office, in granting reissues, is presumed to be right, and the burden of proving the reverse is on the party alleging the invalidity. *American Middlings Purifier Co. v. Atlantic Milling Co.* 168
3. The burden of proving that the reissue is for an invention different from the original is upon the party alleging it. *Reissner v. Anness*. 176
4. The mere making of an article, more than two years prior to the time of the application for a patent, is immaterial, and where the evidence raises a doubt as to the fact of public use or sale, for more than two years prior, such doubt should be resolved against the defendants, upon whom rests the burden of proof. *Comstock v. Sandusky Seat Co.* 188
5. The patent is *prima facie* valid. It is a muniment of title. He who would overcome it must do so by a clear preponderance of evidence. *Id.* 188
 See EVIDENCE, 6; INJUNCTION, 14; PROFITS AND DAMAGES, 6, 7, 10.

CESTUI QUE TRUST.

See EQUITABLE JURISDICTION, 1; INFRINGER, 1; TRUSTEE, 1.

CHOSE IN ACTION.

See ASSIGNMENT OF CHOSE IN ACTION, 1; DAMAGES, 1, 2.

CLAIMS.

See CONSTRUCTION OF PATENTS, 5; SCOPE OF PATENT, 2.

COMBINATION.

See ANTICIPATION, 1; EQUIVALENTS, 3, 4, 5; FORMAL CHANGE, 1; INFRINGEMENT, 13, 14; NEW MATTER, 1; PARTICULAR PATENTS, 22, 24, 72, 88, 120; PATENTABILITY, 8; REISSUE, 2; SCOPE OF PATENT, 2.

Comity—Construction of Contracts.

COMITY.

1. Where a patent has been established by a decision of a circuit court, after careful consideration, that decision is entitled to very great weight in a subsequent application, either before the same court or any other, for a preliminary injunction or for any preliminary relief. *American Middlings Purifier Co. v. Christian.* 42
2. The question of comity between courts of co-ordinate jurisdiction, reviewed. *Atlantic Giant Powder Co. v. Goodyear.* 161
See PARTICULAR PATENTS, 28.

COMMISSIONER.

1. The law does not disqualify a Commissioner of Patents from obtaining a patent after his term of office has expired, for an invention made by him while holding such office, and in such case the invention will date back to the time when it was actually made, although he could not then have obtained a patent for it. *Footle v. Frost.* 607
See ACTION OF PATENT OFFICE.

COMPOSITION.

1. Inventors of a new and useful composition of matter, duly secured by letters patent, are entitled to the same protection as the owners of a patent for a new and useful art, machine or manufacture, and the rules and regulations in suits for infringement are the same in all material respects. *Cahill v. Brown.* 580
See DEFENCE, 3; PARTICULAR PATENTS, 44, 96, 105.

CONCLUSION OF LAW.

See ABANDONMENT, 1.

CONSTRUCTION OF CONTRACTS.

1. Contracts touching the transfer, use and enjoyment of patented inventions are to be construed in the same way as contracts respecting other species of property, so as to carry into effect the intention of the parties, as collected from the language employed, the subject-matter, and the surrounding circumstances. *Star Salt Caster Co. v. Crossman.* 281
2. The conditions in the instrument executed by B. to S. were held to be conditions subsequent, and it was held that such right as passed to S. remained till a forfeiture was enforced. *Stanley Rule & Level Co. v. Bailey.* 297
See CONTRACT, 1.

Construction of Patents—Contract.

CONSTRUCTION OF PATENTS.

1. The invention of the patentee, under which the defendants manufacture, having been completed at about the date of that described in the complainants' patent, and there being no lack of diligence in applying for a patent, the court construed complainants' patent strictly, to avoid infringement, and to sustain both grants. *Moore v. Thomas.* 13
 2. The reason which the patentee gives for the operation or use of his device is not conclusive. *Stow v. City of Chicago.* 83
 3. The court prefers to adopt that construction which, although limiting the scope of the claim, secures to the inventor all that he actually invented and no more, rather than to adopt one which would render the patent invalid, or one which, being broader than the invention, would be a barrier in the way of future progress and invention. *Goodyear Dental Vulcanite Co. v. Davis.* 115
 4. Declarations of a patentee and former owner of a patent, undertaking to restrict the invention within a narrower compass than that stated in his specification, will not be allowed to vary the construction which would otherwise be given to the patent. *Union Paper Bag Machine Co. v. Pultz & Walkley Co.* 403
 5. A claim for: "The application and use of the meter-wheel with its case and contents as an air-blast apparatus, operated by weights or otherwise, not meaning to claim the method of using the meter for measuring gas," construed in connection with the specification, is not for a mere use or result, but for the meter itself. *Munson v. Gilbert & Barker Mfg. Co.* 595
- See ESTOPPEL, 6; PARTICULAR PATENTS, 3, 4, 5, 15, 16, 24, 35, 38, 85, 90, 91, 92, 93, 116; PATENT OFFICE MODEL, 1; SPECIFICATION, 1.

CONTEMPT.

See VIOLATION OF INJUNCTION.

CONTRACT.

1. A court of equity will look at the real state of the case, and regard that as done which ought to be done; so that, if a contract is actually made by which the owner of a patent is bound, a court of equity will disregard the form of its execution. *Labaree v. Peoria, Pekin & Jacksonville R. R. Co.* 180
- See CONSTRUCTION OF CONTRACT, 1, 2; ESTOPPEL, 2; INFRINGER, 3; INJUNCTION, 19; LICENSE, 8.

 Copartners—Date of Application.

COPARTNERS.

See INJUNCTION, 11 ; JOINT INFRINGERS, 1.

CORPORATION.

1. An injunction against a corporation is binding upon all persons acting for or on behalf of it, who have notice of the writ and of its contents, whether they be actually served with it or not. *Phillips v. City of Detroit.* 150
- See INJUNCTION, 12 ; JURISDICTION, 2.

COSTS.

1. Where the clerk of the court taxed the costs in an equitable mode and by consent of both parties, neither party should be permitted to withdraw his consent upon the coming in of the master's report. *Holbrook v. Small.* 625
- See PRACTICE, 11, 15 ; PROFITS AND DAMAGES, 16 ; VIOLATION OF INJUNCTION, 3.

CROSS-BILL.

1. A cross-bill is properly filed to establish an equitable title to letters patent, the legal title to which is in the plaintiff in the original bill filed for an infringement of such patent. *Brandon Mfg. Co. v. Prime.* 191
 2. Where a cross-bill, brought for relief as well as defence, shows that persons not parties to the original bill are necessary parties to the cross-bill, they may properly be made such. *Id.* 191
- See DEMURRER, 2.

DAMAGES.

1. The rule that a cause of action in tort is not assignable, has reference to strictly personal torts, and does not apply to rights of action for damages, and claims growing out of and inhering in property. Such rights will pass by assignment. *Hamilton v. Rollins.* 157
 2. A patentee may assign his right to recover damages for infringements of his patent, committed before the assignment. *Id.* 157
- See PROFITS and DAMAGES.

DATE OF APPLICATION.

See ABANDONMENT, 5.

Date of Invention—Defence.

DATE OF INVENTION.

1. The invention of a patented device may be fairly held to date back to the time when the inventor made models, and entered into a contract for its manufacture. *Comstock v. Sandusky Seat Co.* 188
2. A patentee whose patent is assailed upon the ground of want of novelty, may show by sketches and drawings the date of his inceptive invention, and, if he has exercised reasonable diligence in perfecting and adapting it, and in applying for his patent, its protection will be carried back to such date. *Drafer v. Polomska Mills Corporation.* 214
3. The rule, that, where the complainant offers in evidence the patent in suit, accompanied by the application, the presumption is that the invention was made at the time the application was filed, but that the complainant may, if he can, introduce evidence to show it was made and reduced to practice at a much earlier date, discussed. *Kelleher v. Darling.* 438

See ANTICIPATION, 8 ; COMMISSIONER, 1 ; CONSTRUCTION OF PATENTS, 1 ; EVIDENCE, 6 ; PRIOR PUBLICATION, 1 ; SCOPE OF PATENT, 1.

DECLARATIONS OF PATENTEE.

See CONSTRUCTION OF PATENTS, 4.

DECREE.

1. The form of a decree establishing the validity of letters patent, commented on. *Ready Roofing Co. v. Taylor.* 368
- See ACCOUNT, 1 ; REHEARING, 1 ; REVIVOR, 2.

DEDICATION.

See ABANDONMENT, 2, 3, 4, 5 ; ACQUIESCENCE, 1 ; BURDEN OF PROOF, 4.

DEFENCE.

1. It is a sufficient defence to a suit for infringement, to show that the infringing machine was constructed for use by the defendants or those under whom they claim, with the consent of the patentee, obtained and paid for. *Black v. Hubbard.* 39
2. A defence that the invention involved simply the substitution of one material for another, and was, therefore, not patentable, not

 Delay—Demurrer.

- having been set up in the answer, the objection was overruled. *Comstock v. Sandusky Seat Co.* 188
3. The defence that the reissue is invalid on the ground that the patent does not contain a sufficient specification of the proportions of the ingredients to meet the requirements of the law, unless set up in the answer, cannot be considered. *Wonson v. Peterson.* 249
 4. In a suit in equity on letters patent, the defence of the insufficiency of the specification to enable the invention to be practised, must be set up in the answer, or it cannot be availed of. *Jennings v. Pierce.* 361
 5. A defendant cannot avail himself of the defence that he has not marked or labelled the infringing machines as patented, and especially so when no such defence is set up in the answer. *Herring v. Gage.* 396
 6. Where more than one patent is included in one suit, and more than one invention secured in the same patent, the several defences authorized by the patent act may be pleaded to each patent in suit, and to each invention included in the charge of infringement, but a defence addressed solely to one patent has no application to the other patents. *Kelleher v. Darling.* 438
 7. The nature of the special defences to patent suits, considered. *Id.* 438
 See ANTICIPATION, 7; NOTICE, 1; PLEADING, 2; PRACTICE, 13.

DELAY.

See LACHES; ABANDONMENT.

DEMURRER.

1. A general allegation of profits in the bill is not sufficient to sustain it, where it is plain to the court, from the nature of the invention set forth in the bill, that there can be no profits, and a demurrer will, in such case, be sustained. *Vaughan v. Central Pacific R. R. Co.* 27
2. Where a person commences a suit in equity in this court, and the defendant in such suit files a cross-bill against him, in this court, he cannot set up, as a ground of demurrer to such cross-bill, that a State court had acquired prior jurisdiction on a bill brought in that court for the same relief by the plaintiff in such cross-bill. *Brandon Mfg. Co. v. Prime.* 191
3. Where a demurrer to the whole of a bill sets up that some of the relief prayed is not cognizable in equity, it will be overruled, if some of the relief prayed is properly prayed. *Id.* 191
 See PLEADING, 1, 3.

 Design Patent—Election of Remedies.

DESIGN PATENT.

1. Although, in a design patent, certain parts may resemble parts of other patented designs, yet, if the general result is different from anything known or used before, such difference indicates inventive genius and creative skill, and the design may be patentable. *Perry v. Starrett.* 485
2. To constitute infringement of a design patent, the designs must be so similar as to appear to ordinary observers to be the same, but need not be so nearly alike as to appear to experts to be the same. *Id.* 485
3. If two designs are substantially similar, the fact that different names or trade-marks are or may be used in connection with them will not distinguish them sufficiently. *Id.* 485
 See ESTOPPEL, 4 ; PARTICULAR PATENTS, 87, 101.

DISCLAIMER.

See INJUNCTION, 17.

DISCOVERY.

1. In a bill for a discovery only, in aid of an action at law, it must be alleged that the facts sought to be discovered are material to the complainant's case, and that the discovery of them by defendant is indispensable as proof. *Vaughan v. Central Pacific R. R. Co.* 27

DOUBLE USE.

See DEFENCE, 2 ; PATENTABILITY, 3, 9.

DRAWINGS.

See ANTICIPATION, 6 ; DATE OF INVENTION, 2.

ELECTION OF REMEDIES.

1. Where the infringer makes a profit by the sale or use of the invention, the patentee has an election of remedies for an infringement of his patent, viz., by an action at law for the actual damages sustained, and treble damages if allowed by the court, or by a suit in equity for an account and recovery of the profits made by the infringer. *Vaughan v. Central Pacific R. R. Co.* 27

Employee—Equivalents.

EMPLOYEE.

See LICENSE, 3, 4, 5.

EQUITABLE ASSIGNMENT.

See INFRINGEMENT, 1, 2 ; LICENSE, 3, 4 ; TRUSTER, 1.

EQUITABLE JURISDICTION.

1. The defendant's profits being in the nature of trust moneys held by defendant for complainant's use, require an investigation which a court of law is not so competent to make as a court of equity. *Sayles v. Dubuque and Sioux City R. R. Co.* 219
 See DEMURRER, 3 ; ESTOPPEL, 3.

EQUIVALENTS.

1. Where it appeared that, in a patented pavement, the driving down of wedges into the earth under the blocks could be accomplished just the same under a prior patented device as under the complainant's device: *Held*, that although the prior patentee does not allude to the wedges under the blocks for the purpose of compacting the earth, yet, as it produces that result, his failure to state that as one of the reasons or results does not necessarily affect the question of the anticipation of complainant's invention by the prior patented device. *Slaw v. City of Chicago.* 83
2. The doctrine of mechanical equivalents, in inventions which consist of the mere arrangements of old devices, discussed. *Yuengling v. Johnson.* 99
3. The rule, that when a substitute is used for one ingredient in a patented combination, which substitute has every property and performs every function of the original in the combination, it does not cease to be an equivalent because in addition it does something more and better, recognized. *Atlantic Giant Powder Co. v. Goodyear.* 161
4. The patentee or owner of a patent for a combination is as much entitled to equivalents as the patentee or owner of any other class of inventions. *American Whip Co. v. Lombard.* 598
5. By an "equivalent" of an element in a combination, it is meant that the element or ingredient substituted for the one withdrawn, performs the same function as the other, and that it was well known at the date of the patent in question as a proper substitute for the element omitted in the patented combination. *Id.* 598
 See ANTICIPATION, 1 ; DESIGN PATENT, 3 ; FORMAL CHANGE, 1 ; INFRINGEMENT, 6, 14 ; PARTICULAR PATENTS, 15, 23, 33, 76, 84, 115.

 Estoppel.

ESTOPPEL.

1. Whether, if the first inventor is estopped by conduct of his own, his assignees would be, unless shown to have been cognizant of it, *quære*. *Sprague v. Advance*. 124

2. The complainant had previously brought an action at law against the defendant for damages for the infringement of a patent. The defendant's default was entered, and an arrangement was made that the complainant should buy the stock of infringing articles which the defendant had on hand, and that the defendant should thereupon stop the further manufacture of them. The arrangement was carried out, but the defendant afterwards made and sold articles differing very slightly in form from those previously made by him, and clearly embodying the complainant's invention. Thereupon this suit in equity was brought for an injunction and account: *Held*, that the defendant was estopped by his previous agreement from contesting the validity of complainant's patent. *Brooks v. Moorhouse*. 229

3. A court of equity will not ordinarily entertain jurisdiction of a matter which the person has had an opportunity of litigating in another court, and which had there been decided against him, unless it appears that circumstances beyond his control prevented his making the defence, or trying the question. *Id.* 229

4. The complainants obtained a patent for a design for a stove; one Smith, another inventor, subsequently applied for a patent for a similar design. An interference was declared, and Smith was adjudged by the Patent Office to be the first inventor of the design: *Held*, that this decision was not conclusive on the complainants, so as to prevent them from bringing a suit for infringement of their patent. *Perry v. Starrett*. 485

5. The granting of a reissued patent closes all inquiry into the existence of inadvertence, accident, or mistake. *Thomas v. Shoe Machinery M'fg. Co.* 557

6. Where the Commissioner accepts a surrender and grants a re-issue, his decision is final and decisive, *in a suit for infringement*, unless it appears that he has exceeded his authority, and that there is such a repugnancy between the old and the new patent, that it must be held as a matter of construction that the new patent is not for the same invention as the original. *Id.* 557

See ATTORNEY IN FACT, 1; CONSTRUCTION OF PATENTS, 2;
 COSTS, 1; EVIDENCE, 4, 7; FRAUD, 1; REISSUE, 6; RES
 AJUDICATA, 2.

Evidence.

EVIDENCE.

1. A rejected application for a patent is not evidence that the thing described was ever used, nor is such description a patent or a publication within the statute. *Herring v. Nelson.* 55
2. Where complainants proved admissions of the defendants, (1) that they had sold a number of a certain article, and (2) that said article was substantially the same as the article described in the three claims of the complainant's patent, and no testimony was offered by the defendants, *held*, that the infringement was sufficiently proved. *Thatcher Heating Co. v. Drummond.* 138
3. Proofs necessary upon the trial of an issue raised by a plea alleging new matter in a reissue, considered. *Reissner v. Anness.* 176
4. The grant of a patent is an adjudication, that every fact, which must necessarily appear to entitle the patentee to it, has been established by sufficient proof. *Konold v. Klein.* 226
5. As a patent can only be granted upon the conditions prescribed by the statute, the grant of it necessarily involves a finding, by the officer who allows it, of the existence of such conditions, and is, therefore, sufficient primary evidence of everything necessary to support the patentee's title. *Id.* 226
6. The exhibition of a patent sufficiently establishes the priority of invention, by the patentee, of the invention described in it. This evidence is, however, only presumptive, and its truth may be contested; but the presumption stands until it is overthrown by satisfactory counterproof, and the burden of disproof is upon the contestant. Where the proofs, as to the date of making an invention, alleged to anticipate that of the complainants, are left in a doubtful condition, the court cannot determine that the presumptive title of the patentee to the invention is overthrown. *Id.* 226
7. The decision of the Patent Office, in granting a patent, that the inventor had made the necessary preliminary statutory oath, is final. *De Flores v. Raynolds.* 292
8. It is competent for the court to inspect a model exhibited in evidence, and from such inspection, to decide as to the patentability of the alleged invention. *Everet v. Thatcher.* 435
9. The answer did not explicitly deny infringement, and a witness was produced who saw one or more infringing machines in the defendants' possession, although not in actual use: *Held*, under the circumstances of this case, that the proof of infringement was sufficient. *Gear v. Fitch.* 573

See ANTICIPATION, 7, 8; CONSTRUCTION OF PATENTS, 4; DATE

Exceptions to Master's Report—Formal Change.

OF INVENTION, 3; DISCOVERY, 1; EXCEPTIONS TO MASTER'S REPORT, 1; INFRINGEMENT, 9; INJUNCTION, 2, 18; NOVELTY, 1; PRIOR PUBLICATION, 1; PROFITS AND DAMAGES, 6, 7; TITLE, 1.

EXCEPTIONS TO MASTER'S REPORT.

1. Exceptions by the plaintiff to the master's report, founded on the admission of testimony objected to, held to be immaterial, because, the plaintiff having failed to give adequate evidence as to profits and damages, the defendants were not put on their defence in that respect, and it was unimportant whether they gave competent evidence or no evidence. *Garretson v. Clark.* 352
2. Certain exceptions overruled, as too general. *Id.* 352

EXECUTORS AND ADMINISTRATORS.

See TITLE, 1.

EXPERIMENTS.

1. The experimental use of an invention, by the inventor, as distinguished from its public use, considered. *Jennings v. Pierce.* 361
See ABANDONMENT, 4; INVENTION, 1; INVENTOR, 1, 2; PATENTABILITY, 7; PRIOR KNOWLEDGE, 1.

EXTENSION.

See LICENSE, 1.

FOREIGN PATENT.

1. Under the Act of 1870, a party who has taken out a patent in a foreign country may, at any time during the life of the foreign patent, apply for and receive a patent in this country, provided the invention shall not have been introduced into public use in this country for more than two years prior to the application. *Henry v. Providence Tool Co.* 501
See PRIOR PUBLICATION, 4; TERM OF PATENT, 1, 2, 3.

FORMAL CHANGE.

1. Merely formal alterations of a combination in letters patent do not constitute any defence to the charge of infringement, as the

 Fraud—Infringement.

inventor of such an improvement is as much entitled to suppress every other combination of the same devices to produce the same result as the inventor of any other patented process or product.
American Whip Co. v. Lombard.

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See ANTICIPATION, 1 ; PARTICULAR PATENTS, 57, 68, 84.

FRAUD.

1. Neither reissued nor extended patents can be attacked by an infringer in a suit against him for damages or profits, on the ground that the letters patent were procured by fraud in prosecuting the application for the same before the Commissioner. *Thomas v. Shoe Machinery Mfg. Co.*

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FUNCTION.

See ANTICIPATION, 1 ; PARTICULAR PATENTS, 33.

IMPROVEMENTS.

See PATENTED IMPROVEMENT.

INFRINGEMENT.

1. Where the inventor assigns his inventions to a party to whom the patent is subsequently issued as the assignee of the inventor, upon a verbal agreement that the assignee shall pay the expense of the patent for one-half interest in it, the manufacture and sale of the patented articles by the defendants, to whom the patentee has assigned his equitable interest in the patent, is not infringement. *Whiting v. Graves.* 222
2. The inventor had an equitable title to one-half of the patents. *Id.* 222
3. Where it appeared, that the two contrivances did not perform the same function by the same means ; and that the defendants' products are unfit for the use for which the complainants' products are intended, and the complainants' products are unfit for use for the purposes for which the defendants' are designed, no infringement is proved. *Brown v. Rubber Strap Mfg. Co.* 232
4. A patent for a new manufacture is infringed by the manufacture of the new product by any process whatever. *Badische Anilin and Soda Fabrik v. Hamilton Mfg Co.* 235
5. A joint owner of a patent is liable in damages to the other joint owners for the infringement of the patent owned jointly. *Pitts v. Hall*, 3 Blatchf. C. C. R. 201, distinguished. *Herring v. Gas Consumers' Assn.* 253

Infringement.

6. Though the defendant's machine be more simple, cheaper, and possibly better than the complainant's patented machine, yet if its chief efficiency arises from the use of equivalents to the complainant's patent, it is infringement. *Odiorne v. Denney.* 287
7. A person who infringes a patent is liable for the infringement, although what he does may be an improvement upon the patented device. *De Flores v. Reynolds.* 292
8. The proof of infringement was the sale of a can by the defendants, purchased for and by the direction of the plaintiffs. The can was sold in the usual course of the defendants' business. On all the evidence, it was held that the defendants were dealing in the infringing cans in such a manner that, except as to the one can referred to, they were liable to account, and ought to be restrained by injunction. *Id.* 292
9. The rule, that, where the thing patented is an entirety, consisting of a machine or product, the respondent cannot escape the charge of infringement by alleging or proving that a part of the thing patented is found in one prior patent or machine, and another part in another prior patent or machine, and from the two or any greater number of such exhibits draw the conclusion that the patentee is not the original or first inventor of the improvement in question, considered. *Kelleher v. Darling.* 438
10. It does not follow that, because a device is an improvement on the patented device, a party has the right to manufacture and sell it without the patentee's assent. *Turrell v. Spaeth.* 458
11. Although the patented device without the improvement of the infringer added to it, is of little practical value to the owner or to the world, yet, if there be anything new in it, the owner is entitled to damages for, and protection against, its unauthorized use. *Id.* 458
12. *Gill v. Wells*, 22 Wall. 24, cited and commented on. *Id.* 458
13. Where a party sells an article to persons who intend to use it in the combination claimed in the patent, and it is advertised and sold for that very purpose, such sale is an infringement, although the manufacture and sale would not, *per se*, be an infringement. *Bowker v. Dows.* 518
14. A party who merely substitutes an old element or ingredient for one of the elements or ingredients of a patented combination, is an infringer if the substitute performs the same function as the one omitted, and was well known at the date of the patent as a proper substitute for the element or ingredient employed in the patented combination. *American Whip Co. v. Lombard.* 598

See DESIGN PATENT, 2; EVIDENCE, 2, 9; FORMAL CHANGE, 1;
 JOINT OWNERS, 1; JOINT INFRINGERS, 1; LACHES, 1;
 LICENSE, 1, 2, 8; LICENSEE, 1; PARTICULAR PATENTS, 7, 11,

Infringer—Injunction.

18, 24, 26, 27, 28, 30, 31, 34, 56, 66, 68, 76, 86, 88, 89, 96,
102, 115, 122; SCOPE OF PATENT, 3; VIOLATION OF IN-
JUNCTION, 2.

INFRINGER.

1. The infringer of a patent is held in equity as a trustee of the owner of the patent, and compelled to account to him for the profits realized from the manufacture of the infringing machine or products. *Atterbury v. Gill.* 174
 2. The infringer is also liable to the patentee for damages for the infringement, and the two causes of action, viz: (1) for profits, and (2) for damages, are combined in a suit in equity for infringement. *Id.* 174
 3. Where two patents were granted to different parties for salt pulverizers, the second of which could not be used without infringing the first, and the owner of the first patent made an agreement with the owner of the second, that he and his licensees would make *wooden* pulverizers only, and also consented that the owner of the second patent might work under the the second patent, using only *metallic* pulverizers, and the owner of the first patent afterwards made *metallic* pulverizers in violation of the agreement: *Held*, that he was an infringer upon the second patent. *Held*, also, that parties who acquired a right under the first patent, with knowledge of the agreement, and who made *metallic* pulverizers, would also be liable as infringers. *Star Salt Caster Co. v. Crossman.* 281
- See INFRINGEMENT, 7, 14; JOINT OWNERS, 1; JOINT INFRINGERS, 1; LACHES, 1; LICENSE, 1, 2, 8; LICENSEE, 1.

INGREDIENTS.

See EQUIVALENTS, 3.

INJUNCTION.

1. The fact that defendants are well able to pay ultimate damages is not a sufficient ground for the refusal of a preliminary injunction. *American Middlings Purifier Co. v. Christian.* 42
2. On a motion for a preliminary injunction, the court may consider certain matters independent of the affidavits, such as general principles supposed to be known to every one of ordinary intelligence. *Adams & Westlake Mfg. Co. v. St. Louis Wire Goods Co.* 77
3. Upon an application for a preliminary injunction, it appearing that this suit had been commenced nearly 12 months previously, and the principal ground relied on for applying for the injunction be-

Injunction.

- ing that the validity of the patent had already been sustained by a decision in another circuit, rendered six months before this suit was commenced, and to which the complainants were parties : *Held*, that the application was made too late, and must be refused. *Andrews v. Spear.* 82
4. The rules which should govern courts in granting preliminary injunctions, considered. *Bailey Wringing Machine Co. v. Adams.* 96
 5. Upon the motion, the court ought not to undertake the decision of fairly disputable questions of law and fact. *Id.* 96
 6. When the motion is made and contested only upon the evidence which resulted in a judicial decision in complainant's favor in another case, such evidence ought to be taken as conclusively establishing the complainant's title. Not so, however, if new evidence is exhibited of such significance as would probably, if it had been presented, have changed the former decision. *Id.* 96
 7. The provisions of the statutes, conferring upon the Circuit Courts power. In cases where there appears to be danger of irreparable injury from delay, to grant an order restraining the act sought to be enjoined, pending the decision of a motion for a preliminary injunction, reviewed. *Yucngling v. Johnson.* 99
 8. The action of the Patent Office, where the parties have been before it upon an interference, is sufficient to make such a *prima facie* case as to justify the action of a court, on almost any motion for a preliminary injunction. *Id.* 99
 9. A court may safely presume, upon a motion for a preliminary injunction, that the action of the Patent Office, after a sharp contest between patent lawyers and experts, is correct. *Id.* 99
 10. An application was made for a preliminary injunction, to restrain a cemetery corporation from using a stone breaking machine, in infringement of a patent. The machine was used to break stone to keep in repair the roads of the cemetery. The defendants set up a license. The plaintiff exercised his monopoly by granting licenses to use his machine. The defendants offered to pay into court the amount of the license fee on its machine, to abide a final decision on the question of the existence of a license : *Held*, that, on such payment into court, the application must be denied. *Blake v. Greenwood Cemetery.* 112
 11. P. obtained a patent, as inventor, in March, 1874, for an "improvement in bungs for casks." In June, 1876, B. applied for a patent, as inventor, for the same invention. An interference was declared, and proofs were taken. The examiner decided in favor of P. On appeal, the board of examiners decided in favor of B. On further appeal, the Commissioner of Patents decided in favor of P. After the issue of the patent to P., B. and F. were in part-

Injunction.

- nership with P., and the firm made the bungs and advertised them as secured by patent. After the dissolution of such partnership, B. and F. continued to make the bungs : *Held*, that P. was entitled to a preliminary injunction to restrain B. and F. from so doing. *Pentlarge v. Beeston*. 142
12. The members of the Board of Public Works of the City of Detroit are bound by an injunction against the city. *Phillips v. City of Detroit*. 150
13. The patent having already been contested and held valid in this court on final hearing, this court will not postpone the granting of a preliminary injunction, merely because another suit is pending on the patent in another circuit. *Atlantic Giant Powder Co. v. Goodyear*. 161
14. Upon an application for a preliminary injunction, it is for the plaintiff to sustain the allegation of infringement by a preponderance of evidence. *American Middlings Purifier Co. v. Atlantic Milling Co.* 168
15. Where the complainant's patents had been sustained by the Supreme Court, and suit was afterward brought against other parties for infringement of them, and the complainant moved for a preliminary injunction, and the defendant denied the validity of the patents and the infringement, and introduced the affidavits of several witnesses denying the infringement, while the complainant introduced but one to sustain it; and it also appearing that an injunction would be a hardship upon the defendant, and no allegation of defendant's insolvency being made : *Held*, that the injunction should not be granted, but that the defendant should be required to keep an account, and report monthly under oath. *Id.* 168
16. After suit brought, the defendants stopped using the infringing device, but did not disclaim the right to it : *Held*, not a reason why a decree for an injunction should not be granted. *Bullock Printing Press Co. v. Jones*. 195
17. A preliminary injunction vacated in a case where the patentability and novelty of the complainants' invention were doubtful. *Wilson Packing Co. v. Clapp*. 243
18. The complainant's patent was for a process of curing and putting up fish, which in the claim was described to be—to take out the principal bones and fins while the fish is fresh, and, when partly cured and dried, to remove the skin and with it the entire mucous membrane, and to pack in boxes of convenient size. The novelty consisted in the removal of the mucous membrane. Upon an application for a preliminary injunction, the evidence of infringement was very meagre, and quite insufficient, unless it was aided by the affidavit of the defendant himself, who said he prepared the fish by removing the skin, and then the bones, and then packed it in

Interest—Intimidation.

- boxes. He did not say whether he removed the mucous membrane or not, and there was no evidence whether in removing the skin the membrane was necessarily removed; but he denied the novelty of the invention: *Held*, that the application must be denied. *Crowell v. Harlow*. 478
19. Where the complainant licensed the defendant, and, as a part of the contract, agreed that he would sell no licenses for less than a certain price, and the defendant having failed to pay his royalties, the complainant filed his bill for infringement, and moved for a preliminary injunction, upon which motion, it was shown that the complainant had granted licenses for a less consideration and in such a way as to injure the defendant: *Held*, that the injunction should be refused. *Crowell v. Parmenter*. 480
20. Under such circumstances, a court of equity will not grant an injunction to the complainant in advance of the trial or hearing, at which the accounts and damages may be properly adjusted between the parties. *Id*. 480
21. A motion for a preliminary injunction to restrain the infringement of a patent was made six months after it was issued. The answer put in issue its validity, and set up a license to construct and use the machine complained of, granted by the plaintiff before the patent was issued. It was disputed, on affidavits, whether the defendant's machine was so made with the knowledge and consent of the plaintiff, and whether the invention was new, and the defendant was shown to be able to respond in damages: *Held*, that the motion must be denied. *McGuire v. Eames*. 499
- See ACQUIESCENCE, 1; COMITY, 1; CORPORATION, 1; INFRINGEMENT, 8; LACHES, 4; NON-RESIDENT, 1; PARTICULAR PATENTS, 40; PRACTICE, 1, 2, 3; VIOLATION OF INJUNCTION, 1, 2, 3.

INTEREST.

1. Interest on profits will not be allowed. *Brady v. Atlantic Works*. 577
- See PROFITS AND DAMAGES, 9, 16.

INTERFERING PATENTS.

See ESTOPPEL, 4; INJUNCTION, 8.

INTIMIDATION.

1. Remarks by the court upon the action of complainants, in sending circulars and notices to parties engaged in the trade, dealing with complainants' competitors, calculated to alarm such persons

Invention—Joint Infringers.

and injure the trade of competing manufacturers, before the complainants' rights are finally adjudicated. *Wilson Packing Co. v. Clapp.*

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INVENTION.

1. Mere discovery of a patentable improvement does not constitute it the proper subject of a patent, unless it be embodied, in a machine, into working machinery, and adapted to practical use. *Fudson v. Bradford.* 539
 2. It being old to cut dies in the face of a trip-hammer, or in the anvil upon which a trip-hammer works, so as to forge iron into different shapes, there was no invention in making dies in such hammers or anvils of the proper shape to form chord-bar heads for iron bridges. *Smith v. American Bridge Co.* 565
- See ANTICIPATION, 1, 2, 3, 6, 7, 8; INFRINGEMENT, 1; INVENTOR, 2; PARTICULAR PATENTS, 36, 58, 61, 104, 111; PATENTABILITY, 4, 5, 6, 7, 13; PRIOR KNOWLEDGE, 1,

INVENTOR.

1. Knowledge of prior experiments by another, will not defeat the claim of the patentee to an invention, if it appears that, after those experiments were abandoned, he first perfected and adapted the invention to actual use. *Union Paper Bag Machine Co. v. Pullz & Walkley Co.* 403
 2. The patentee has the right to take up the improvement at the point where it was left by his predecessor, and if, by the exercise of his own inventive skill, he is successful in first perfecting and reducing to practice the invention which his predecessor undertook to make, he is entitled to the merit of such improvement, as an original inventor. *Id.* 403
- See COMMISSIONER, 1; INFRINGEMENT, 9; LICENSE, 3.

ISSUES.

See EVIDENCE, 3; PRACTICE, 16.

JOINT INFRINGERS.

1. In a suit against three defendants, it is proper to award against all three the profits made by them jointly, while partners, and against two of them the profits they made after their partnership with the third defendant was dissolved, and while they were using the patented invention in conjunction with a fourth person, not a defendant. *Herring v. Gage.* 396

 Joint Owners—Laches.

JOINT OWNERS.

1. Although one joint owner of a patent can use the common patent without being liable to account to the other joint owners, he cannot use a patent infringing the common patent without liability to the other joint owners. *Herring v. Gas Consumers' Assn.* 253
See INFRINGEMENT, 5.

JURISDICTION.

1. B., a patentee, granted to S. the exclusive right to make and vend the invention during the life of the patent, for a royalty. S. sued B. in equity, alleging that he was infringing the patent: *Held*, that, whether S. was a licensee or a grantee, he was suing B. on an infringement, and that the court had jurisdiction of the suit. *Stanley Rule and Level Co. v. Bailey.* 297
2. A foreign corporation transacting business in a state, and amenable to the process of the courts of such state, is "found" within the state, in the sense of the judiciary acts, and may be sued in the federal courts therein. *Williams v. Empire Transportation Co.* 533
See EQUITABLE JURISDICTION; PRACTICE, 4, 5.

LACHES.

1. A patentee, who stands by for a considerable time and takes no steps against infringers of his patents, for the reason that his patents were defective on account of including more than he had really invented, and who, for the purpose of applying for and obtaining reissues which would limit his claims to his actual invention, employs himself during that time obtaining information and making inquiries, so as to prepare himself to sue the infringers, is not guilty of *laches*. *American Middlings Purifier Co. v. Christian.* 42
2. The rule, that in cases of delay in applying for patents, the intervening rights of other inventors who in the mean time have devised and patented the same thing, should be protected against the delaying inventor, does not apply to the case of the complainants, who did not know of or acquiesce in the acts of the intervening inventors. *Sprague v. Adrianse.* 124
3. The case of *Consolidated Fruit Jar Co. v. Wright*, 4 Otto, 92, distinguished. *Id.* 124
4. Where a patentee had knowledge of the infringement for nearly two years before applying for a preliminary injunction, and had

License.

- warned the defendants that they were infringers, a motion for such injunction was denied. *Sperry v. Ribbons*. 260
5. Patentees must not expect from the court a greater degree of diligence than they themselves exhibit. *Id.* 260
- See ABANDONMENT, 2, 5 ; INJUNCTION, 3.

LICENSE.

1. The agent of the patentee authorized H. & Co., for a valuable consideration, to construct a furnace, involving the patent, for use at their tannery. The furnace was constructed there by H. & Co., in pursuance of the license, and the defendants afterward acquired it from them : *Held*, that the patentee, who was the complainant's intestate, had no right or interest in respect to the furnace so built, or to the use of it in the place where it was so built, during the term of his original patent, and acquired none by the extension thereof afterward obtained, and that the defendants, who acquired it from H. & Co., have had and still have the right to use it, clear of any claim for infringement by the patentee or his representatives. *Black v. Hubbard*. 39
2. Where the infringing articles were constructed and used with the knowledge of the complainant, and with his consent, and were constructed by him or under his direction, and put into defendant's factories at its expense while in its employment, and were used under his direction before and up to the date of his application for a patent : *Held*, that such a state of facts operates as a special license to use such specific articles. *Magoun v. New England Glass Co.* 114
3. An employment to invent and perfect machinery for a particular purpose, while it will operate as a license to the employer to use machines invented by the employee, and put in use under such employment, will not, of itself, confer upon the employer any legal title to the invention itself or to the letters patent protecting it. *Whiting v. Graves*. 222
4. S. made a contract with W. that, for a stipulated salary paid to S., he, W., was to have the exclusive benefit of the services of S. in making machinery and improvements in W.'s premises, and he was also to have the exclusive benefit of the inventive faculties of S., and of such inventions as he should make during the term of service. The term was one year, but at the expiration of that time S. continued in the service of W. for some time longer without making any new agreement. During these times S. invented and constructed several machines, which were patented : *Held*, that W. was entitled to an exclusive use of these machines during

License Fee—Licensee.

- the existence of the patents, and any extensions, renewals, or re-issues thereof. *Wilkens v. Spafford*. 274
5. Before S. entered the service of W. he had invented and patented a machine which was not then practically useful, but which during the period of said service S. perfected at W.'s expense: *Held*, that W. was entitled to a license for the use of such machine. *Id.* 274
6. By a license under letters patent H. granted to L. and to his "legal representatives" "the full and exclusive right to use and to sell to be used" the invention, as applied to a specified construction, "as secured by the said letters patent, for, to and in the State of New York, I excepting and reserving the right to manufacture the said invention for myself and legal representatives:" *Held*, that by the license L. acquired the right to manufacture the invention for such sale or use, and that the license was assignable by L. *Hamilton v. Kingsbury*. 346
7. Persons duly licensed by the owner of a patent may make, use, and vend the patented product within the terms and conditions of their license without hindrance or interruption by the patentee, if they themselves comply with the terms and conditions of the license. *Cohn v. National Rubber Co.* 568
8. Licensees will not be permitted to put an end to the contract, or deny the validity of the patent, repudiate the title of their licensor, refuse to pay the stipulated royalty, and, when the validity of the patent is sustained in spite of their hostilities, set up, as a defence to the charge of infringement, the prior license which they had wrongfully repudiated, and the terms and conditions of which they had refused to acknowledge and perform, upon the ground that the patent was inoperative, invalid and void. *Id.* 568
- See CONSTRUCTION OF CONTRACTS, 1; DEFENCE, 1; INFRINGER, 3; INJUNCTION, 10, 19, 21; JURISDICTION, 1; LICENSE, 1; PATENTED ARTICLE, 3, 4.

LICENSE FEE.

See ACTION AT LAW, 1; PROFITS AND DAMAGES, 1, 3; 10, 11, 15; VIOLATION OF INJUNCTION, 2.

LICENSEE.

1. Where the licensees repudiate the license they may be treated by the owner of the patent, at his election, as infringers. He may have his remedy by suit upon the license, or he may treat the licensees in future as infringers of his exclusive rights under the patent. *Cohn v. National Rubber Co.* 568
- See INFRINGER, 3; LICENSE, 7, 8.

Limitation—New Matter.

LIMITATION.

See STATE OF LIMITATION.

MARKING PATENTED ARTICLES.

1. The question, whether it is a violation of the statute, to mark with the word "patent" articles which are not patentable, discussed. *Oliphant v. Salem Flouring Mills Co.* 256
See DEFENCE, 5 ; PARTICULAR PATENTS, 40.

MASTER'S REPORT.

1. The findings of the master, in ascertaining the profits made by the defendants, in infringing letters patent, sustained. *Herring v. Gage.* 396
2. The case of *Mowry v. Whitney*, 14 Wall. 620, explained. *Id.* 396

MEASURE OF DAMAGES.

See PROFITS AND DAMAGES.

MODEL.

See PATENT OFFICE MODEL ; DATE OF INVENTION I ; EVIDENCE, 8.

NEW MANUFACTURE.

1. When a thing is produced new, in and of itself, it is patentable as a new manufacture. *Badische Anilin and Soda Fabrik v. Hamilton Mfg. Co.* 235
See INFRINGEMENT, 4.

NEW MATTER.

1. The question as to what constitutes new matter in a reissue of a patent for a combination, discussed. *Kerosene Lamp Heater Co. v. Littell.* 312
2. The invention described in the original patent, being in legal contemplation a new and useful manufacture, a reissue cannot include a claim for the process of manufacture, where in the original there was not a sufficient description of such process. *Kelleher v. Darling.* 438
3. A patentee is not allowed to interpolate new features into a re-

, New Trial—Notice.

- issue which are not described, suggested, or substantially indicated in the specification, drawings or Patent Office model of the original patent. *Thomas v. Shoe Machinery Mfg. Co.* 557
4. Where material interpolations are made in a reissue, they show that the Commissioner exceeded his jurisdiction, and in such case it clearly becomes the duty of the court to declare the reissued patent void. *Id.* 557
5. Where a reissue contains nothing that might not have been claimed in the original patent, it is not for a different invention. *Dra-per v. Wattles.* 618
- See BURDEN OF PROOF 3; EVIDENCE, 3; PARTICULAR PAT-ENTS, 35, 79, 90, 97; PRESUMPTION, 5; REISSUE, 1, 3, 9.

NEW TRIAL.

1. The rules stated which govern the question of granting a new trial, to introduce new evidence. *Ready Roofing Co. v. Taylor.* 368
2. The knowledge and diligence of counsel are to be considered, on such question, the same as those of the party. *Id.* 368
3. In this case, it was held, that, by the exercise of ordinary diligence, the new evidence sought to be introduced could have been discovered, so as to be introduced at the former trial, and that it was not of such materiality and weight that it would probably change the result. *Id.* 368
- See REHEARING 1, 2.

NEWLY DISCOVERED EVIDENCE.

See INJUNCTION, 6; NEW TRIAL, 1, 2, 3; PRACTICE, 14.

NON-RESIDENT.

1. A preliminary injunction will not be granted against a defendant not residing in the district, and having no place of business therein, and who is not shown to have made or sold the infringing articles in said district. *Wilson Packing Co. v. Clapp.* 243

NOTICE.

1. Requisites of notice of defences of prior patents or public use, stated. *Judson v. Bradford.* 539
- See ASSIGNMENT OF CHOSE IN ACTION, 1; CORPORATION, 1; INFRINGER, 3; PLEADING, 2; PRACTICE, 1, 2, 3, 12, 13.

 Novelty—Particular Patents.

NOVELTY.

1. A patent, to be overthrown on the question of novelty, must be overthrown by clear and satisfactory proof. *Herring v. Nelson.* 55
2. The patentee's invention consisted in supplying dies of novel construction and form, and so adapted to forming the eyes of picks by a new method, and in combining with the old steps, in forming the eyes of picks, a new element, viz., the drawing them down on a mandrel between rolling dies which completely encompass the walls of the eye, this process resulting in the elongation of the walls of the eye as may be desired, with uniform thickness, and the complete formation of the eye by the process of rolling alone, leaving only finishing to be performed: *Held*, that this last step in the process of manufacture is new, and impresses upon the whole method the character of novelty. *Klein v. Park.* 145

See ANTICIPATION, 7; DATE OF INVENTION, 2; INFRINGEMENT, 11; INJUNCTION, 17, 18, 21; INVENTION, 2; NEW MANUFACTURE, 1; ORIGINALITY, 1; PARTICULAR PATENTS, 44, 87; PATENTABILITY, 8, 9; PRACTICE, 12; PRESUMPTION, 6; PRIOR PUBLICATION, 1; PRIOR USE, 1; REISSUE, 3; REJECTED APPLICATION, 1.

ORIGINALITY.

1. The rules of law applicable to the test of the originality and priority of an invention, considered. *Bullock Printing Press Co. v. Jones.* 195
- See INVENTOR, 2; PRESUMPTION, 4.

PARTICULAR PATENTS.

ADAMS—CORN SHELLERS.

1. Letters Patent No. 132,128, granted to Henry A. Adams, October 15th, 1872, for improvement in corn-shellers, held valid. *Adams v. Foliet Mfg. Co.* 1

ADAMS—ELECTRO-DEPOSITION OF NICKEL.

2. The letters patent granted to Isaac Adams, Jr., August 3d, 1869, for an "improvement in the electro-deposition of nickel," are valid, the first, third, and fourth claims of the patent being: "1. The electro-deposition of nickel by means of a solution of the

Particular Patents.

double sulphate of nickel and ammonia, or a solution of the double chloride of nickel and ammonium, prepared and used in such a manner as to be free from the presence of potash, soda, alumina, lime or nitric acid, or from any acid or alkaline reaction.

3. The methods herein described, for preparing the solution of the double sulphate of nickel and ammonia, and the double chloride of nickel and ammonium. 4. The electro-plating of metals with a coating of compact, coherent, tenacious, flexible nickel, of sufficient thickness to protect the metal upon which the deposit is made from the action of corrosive agents with which the article may be brought in contact." *United Nickel Co. v. Harris.* 627
3. The first claim is a claim to the electro-deposition of nickel by means of any solution of the double sulphate of nickel and ammonia, or of any solution of the double chloride of nickel and ammonium, however such solution may be prepared, provided such solution is so used as to be free, while the electro-deposition of the nickel is going on, from the presence of potash, soda, alumina, lime or nitric acid, or from any acid or alkaline reaction. *Id.* 627
4. The fourth claim is a claim to the product or coating named in it, having the qualities described in it, when such product or coating is produced by employing the invention covered by the first claim. *Id.* 627
5. Although a sulphate or a chloride of potash or soda may be introduced into a solution of the double sulphate of nickel and ammonia, or into a solution of the double chloride of nickel and ammonium, yet, if the solution is so used, in the electro-deposition of nickel, that the sulphate or the chloride will not be decomposed, the first claim is infringed. *Id.* 627

BAILEY—PLANES.

6. The Victor plane, covered by letters patent granted to Leonard Bailey, December 12th, 1876, is an infringement of the third and fourth claims of the reissued letters patent granted to Leonard Bailey, June 22d, 1875, the original patent having been granted to him August 6th, 1867. *Stanley Rule and Level Co. v. Bailey.* 297

BARKER—BUCKETS FOR CHAIN PUMPS.

7. The claims of the reissued letters patent granted to William C. Barker, July 6th, 1875, for an "improvement in buckets for chain-pumps" (the original letters patent having been issued to said Barker June 20th, 1871, and reissued to him May 19th, 1874), namely, (1.) An elastic bucket for chain-pumps, adapted to fit and

Particular Patents.

work in the bore of a pump tube, to raise the water by suction, provided with a suitable orifice or outlet through which the water remaining in the pump-tube above the bucket is allowed to escape down to the source of supply, substantially as and for the purpose set forth; (2) A solid elastic bucket, having an elastic bearing edge, and its upper portion convex or contracted from said edge, whereby the bucket will readily yield to any irregularities in the pump-tube, and admit of its being easily drawn up, while at the same time it will resist moving downward, substantially as and for the purpose specified," are infringed by the buckets for chain-pumps described in the letters patent granted to Deloraine F. Stowe, February 23d, 1875, for an "improvement in buckets for chain-pumps." *Barker v. Stowe.*

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8. The two claims of said reissued letters patent are void for want of novelty. *Id.*

337

BARTON—CHIME TOYS.

9. The reissued patent granted to complainants, as assignees of Elijah C. Barton, September 14th, 1875, for chime toys, *held valid.* *Abbe v. Clark.*

211

BLACK—TEMPERING UMBRELLA RIBS.

10. The invention set forth in letters patent granted to A. Stewart Black, July 14th, 1863, for an "improvement in tempering umbrella ribs," defined. *American Mfg. Co. v. Lane.*

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11. The first claim of said patent, namely: "Constructing the tempering die with a square hole, corresponding in size to the wire to be tempered, in order that the wire may be straightened in all directions and the flattened portions of the wire be brought in line with each other, as and for the purposes specified," is infringed by the use, for the tempering of umbrella ribs of U-shaped wire, with wider flattened parts in them, of a die formed of two plates, one above and one below, with the groove in one plate shallow and semi-elliptical, to accommodate one edge of the flattened parts of the rib, and with the groove in the other plate broader and deeper, and, in its cross-section, the shape of the body of the wire, with a channel opposite to and like the groove in the other plate, to accommodate the other edge of the flattened part of the rib. *Id.*

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12. The prior existence of a square hole or groove for the purpose of drawing through it square bars or strips of metal, to compress them and straighten them, does not anticipate the invention claimed in said first claim. *Id.*

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BLAISDELL—SODA WATER APPARATUS.

13. Letters patent No. 40,811, granted to John H. Blaisdell, December 8th, 1863, for an improvement in soda water apparatus, in view of the state of the art, *held valid*. *Blaisdell v. Tufts*. 521

BOUVET—TIN CANS.

14. The invention described in the reissued letters patent granted to Moritz Pinner, November 1st, 1864, for an improvement in tin cans (the original patent having been granted to Jean Bouvet, June 28th, 1864) is not a different one from that described in the original patent, although, in the reissue, the device is described as applicable to different forms of construction of cans, and by different modes, from those in the original. *De Flores v. Reynolds*. 292
15. Soldering a flat strip of metal over a slot, by soldering the edges of the strip to those of the slot, is not different from soldering a round wire into a slot, by connecting the edges of the slot with solder over the wire. *Id.* 292
16. The requirement, in the patent, that the solder is to be torn, indicates that it must not be of a kind so hard that it cannot be torn. *Id.* 292

BOWKER—SYRUPS AND MINERAL WATERS.

17. Letters patent No. 193,476, granted to Horace L. Bowker, July 24th, 1877, for an improvement in syrups and mineral waters, *held valid*. *Bowker v. Dows*. 518
18. A patent for a combination of saponine extracted from vegetable products with liquids containing carbonic acid gas is infringed by the sale of vegetable products containing saponine for use in such combination. *Id.* 518

BULLOCK—ADAMS—SELDEN—PRINTING MACHINES.

19. The invention described in the specification of complainant's patent for an improvement in printing machines, being for the employment of a yielding sheath in two strips, pressing outward, one on each side of a fixed knife in a revolving cylinder, for two purposes; one to hold the paper firmly against the edges of the groove for the knife in the opposite cylinder while the knife severs it, the other to hold the end of the web till it is taken by other machinery and drawn along for the next operation; and the ninth claim of the patent being for the combination of the sheath with the fixed

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knife in the same cylinder : *Held*, not anticipated by a combination composed of a springing knife, with a sheath in the same or opposite cylinder. *Bullock Printing Press Co. v. Jones.* 195

CAHILL—BRONZE DRESSING FOR LEATHER.

20. Letters patent No. 83,925, granted to Miles S. Cahill, November 10, 1868, for an improvement in bronze dressing for leather, *held* valid. *Cahill v. Brown.* 580

CHAFFEE—INDIA-RUBBER DOOR-MAT.

21. The patent granted to Edwin M. Chaffee, numbered 19,347, dated February 16th, 1858, for a cellular india-rubber door-mat, construed, and, upon the construction given, the defendants *held* not to have infringed. *Brown v. Rubber Step Mfg. Co.* 232

CLOUGH—GAS-BURNERS.

22. The first claim in the patent to Clough, June 14th, 1870, for improvement in gas-burners, includes the combination of the perforated burner with surrounding tube, irrespective of any method of regulating the escape of gas from the perforations, and is found in the patent to J. F. Barker, July 26th, 1870, who is the prior inventor of the same. *Clough v. Gilbert & Barker Mfg. Co.* 523
23. The employment of a slit extending down to the base of the burner, instead of small perforations at the base : *Held*, to be an equivalent, the structure and mode of operation of the combination being the same. *Id.* 523
24. A combination, such as was embraced in the second claim of Clough's patent, being found to be old in the art, the claim was limited in construction so as to include the particular devices shown, and, when so limited, the defendant's device did not infringe. *Id.* 523

COLLENDER—BILLIARD-CUSHIONS.

25. Reissued Letters Patent No. 2,511, granted to Hugh W. Collender, March 19th, 1867, for an "improvement in cushions for billiard-tables," *held* to be for the process or art of making the cushion, as described, and not for the cushion as an article of manufacture. *Collender v. Bailey.* 217

CUMMINGS—ARTIFICIAL GUMS AND PALATES.

26. The reissued letters patent granted to the Goodyear Dental Vulcanite Company, March 21st, 1865, originally issued to John A.
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- Cummings, June 7th, 1864, for an "improvement in artificial gums and palates," the validity of which was settled in *Smith v. Goodyear Dental Vulcanite Co.* 93 U. S., 486, are infringed when parts of hard rubber plates of teeth are replaced by new parts, made of the materials and according to the mode described in the patent. *Goodyear Dental Vulcanite Co. v. Preterre.* 471
27. The patent is also infringed, when the hard rubber plate formed and holding teeth in the manner prescribed in the patent is made, although it is mounted on a gold plate, which goes between it and the mouth, so that it does not touch the surface of the mouth. *Id.* 471
28. The use of celluloid and rose pearl, in making plates in the manner described in the patent, instead of hard rubber, held to be an infringement, although, in a prior case, in another circuit, such use was held to be not an infringement, but on different evidence. *Id.* 471
29. The decision of the Supreme Court in *Smith v. Goodyear Dental Vulcanite Company*, 3 Otto, 486, must be considered as final, not only as to the validity, but as to the construction, of the Cummings patent for an improvement in artificial gums and plates. *Goodyear Dental Vulcanite Co. v. Davis.* 115
30. The article patented by Cummings being a set of artificial teeth, consisting of a plate of hard rubber or vulcanite, with teeth, or teeth and gums, secured thereto in the manner described in the patent, by embedding the teeth and pins in the vulcanizable compound, so that it should surround the teeth and pins while the compound is in a soft state, before it is vulcanized, and so that, when the compound is vulcanized, the teeth are firmly secured by the pins embedded in the vulcanite, and there is a tight joint between the vulcanite and the teeth: *Held*, that a corresponding plate of celluloid instead of vulcanite does not infringe the patent. *Id.* 115
31. To infringe the patent there must be an equivalent of the plate of hard rubber, made and manipulated by a process equivalent to the described process of compounding a gum with sulphur, and applying it, and moulding it, and incorporating it with the teeth and gums when in a soft state, and then subjecting it to heat to harden and vulcanize it. *Id.* 115

CUMMINGS—CATCH FOR SPECTACLE CASES.

32. The claim of letters patent No. 26,891, granted to George N. Cummings, January 24th, 1860, namely: "Forming a snap for metal boxes, such as spectacle cases, tobacco boxes, etc., by making corresponding indentations on the rim of the lid and on the side of

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the said boxes, in the manner and for the purpose set forth herein,"
held valid. *Parker v. Remhof.* 550

33. The defendant's fastening, which has a perforation into which a protuberance on the box snaps, thus fastening it, infringes the patent, as the sides of the perforation or hole in the rim of the defendant's box perform the same function as the sides of the indentation in the complainant's box, and there is no difference in principle or effect between the two fasteners. *Id.* 550

DE PUY—HOE—PRINTERS' GALLEYS.

34. The first claim of reissued letters patent No. 6326, granted to complainants March 9th, 1875, for an improvement in printers' galleys, namely: "The combination of the edge-rail and its metallic facing or lining by means which secure their union, and leave the metallic facing or lining smooth or free from perforations or similar interruptions, substantially as and for the purpose set forth." Held valid, and to be infringed by the use of an L-angle metal facing for ledges with smooth unperforated face, supported by a wooden rail attached to it by screws through the bed-plate and the bottom part of the L. *Hoe v. Tuthill.* 206

DEUCHFIELD—COOLING AND DRYING MEAL.

35. The first claim of reissued letters patent granted to John Deuchfield, January 16th, 1872, for an "improvement in cooling and drying meal," and extended, April 17th, 1872, for seven years from April 20th, 1872 (the original patent having been granted to said Deuchfield, April 20th, 1858), namely, "The arrangement and combination of the suction fan G, and the spout I, with the meal-chest D, receiving the meal from the grinding stones, and provided with a conveyor shaft F, and elevator F', substantially as and for the purpose set forth," is not subject to the objection that it is for a different invention from that for which the original patent was issued, although the original patent claimed only a combination which embraced the elements composing the combination claimed in said first claim with other elements. *Herring v. Nelson.* 55
36. The combination of machinery for cooling meal, in the process of converting grain into flour, with machinery for preventing the waste of meal, constitutes a patentable combination, and not a mere aggregation. *Id.* 55

EPPINGER—TOBACCO.

37. The letters patent granted to Issac Eppinger, June 17th, 1873, for an "improvement in plug and bunch tobacco," are valid. *Eppinger v. Richay.* 69

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38. The claim of said patent : namely, " Plug or bunch tobacco made as herein described, the same consisting of a rope or strand composed of a sweetened or prepared filler inclosed in a binder, in turn enveloped in a wrapper, the said rope being coiled around a central core forming a continuous part of the rope, and the bunch thus made being subjected to a pressure, as and for the purposes set forth," claims a patentable invention. *Id.* 69
39. The peculiarity of the invention is in the form and shape of the coil, and the change required invention, and the article produced is a new and useful article of manufacture. *Id.* 69

FAIRBANKS—SCALES.

40. E. & T. Fairbanks & Co., manufacturers of scales, alleged that J. made scales, by using, to make the iron castings thereof, the corresponding parts of a scale made by them, to form the moulds for those castings, and that the general shape and arrangement and color and external appearance of such scales were imitated from the Fairbanks' scales so nearly that only an expert in scales could distinguish the differences between them. The words " Fairbanks' patent " were cast on the scales made by both parties. All the patents which Fairbanks & Co. had had, had expired. Fairbanks & Co. applied for an injunction to restrain J. from using the words " Fairbanks' patent " on his scales, and from making or selling an imitation of Fairbanks & Co.'s scales : *Held*, that the application must be denied ; that the words " Fairbanks' patent " were not a trade-mark ; and that J. did not represent his scales to be of the make of Fairbanks & Co. *Fairbanks v. Jacobus.* 103

FISH—LAMP CHIMNEYS.

41. The first, second, and third claims of complainant's reissued letters patent, Number 7,069, dated April 18, 1876 (the original letters patent having been granted to Warren L. Fish, June 17th, 1862), for lamp chimneys, *held* valid, and that defendants infringe the same. *Kerosene Lamp Heater Co. v. Littell.* 312

FOOTE—BAG TIE.

42. Letters patent No. 135,899, granted to Elisha Foote, February 18th, 1873, for a bag tie, *held* valid. *Foote v. Frost.* 607
43. Where the complainant's patent was for a wire bag fastener, and a prior patent was for a device of a similar structural plan, but made of a slotted metal plate instead of wire, and was intended as a fastener for the lacings of shoes and corsets, and there was no

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evidence that the prior invention would answer the purpose for which it was intended: *Held*, that under the circumstances, it would not be an anticipation of the complainant's invention. *Id.* 607

GRAEBE & LIEBERMANN—ARTIFICIAL ALIZARINE.

44. Before the invention covered by complainants' patent, "alizarine" had been used as a generic term, applied to many different dye-stuffs, and yellow and green alizarines were in the market. Chemically pure alizarine existed only in the books, and a body approximating to it only in the laboratory of the chemist. The claim of complainants' reissued patent (Division B) was for "artificial alizarine produced from anthracene or its derivatives by either of the methods herein described, or by any other method which will produce a like result:" *Held*, under the circumstances of the case, that the reissue was not void for claiming alizarine, which was before well known, but that the invention patented was the new composition, which contained, combined with alizarine, other bodies of themselves effective agents before unknown, and which existed for the first time when produced by the patentees. *Badische Anilin & Soda Fabrik v. Hamilton Mfg. Co.* 235
45. The reissued letters patent, Division B, granted to Charles Graebe and Charles Liebermann, April 4th, 1871, for an improvement in dyes or coloring matters from anthracene, are valid. *Badische Anilin and Soda Fabrik v. Higgin.* 462
46. The original patent claimed "the within described process for the production of alizarine, by first preparing bibromanthrakinson, or bichloranthrakinson, and then converting those substances into alizarine, substantially as above set forth." The reissue describes the same process, producing the same substance, and claims, "Artificial alizarine, produced from anthracene, or its derivatives, by either of the methods herein described, or by any other method which will produce a like result." The case was a proper one for a reissue. *Id.* 462

GRAHAM—CARRIAGE BODIES AND SEATS.

47. Reissued letters patent No. 4,780, granted to the complainants, assignees of S. B. Graham, for improvement in carriage bodies and seats, *held* valid. *Comstock v. Sandusky Seat Co.* 188

GRAHAM—HARVESTER.

48. The invention claimed in the first and second claims of Letters Patent No. 74,342, granted to Alvaro B. Graham, February 11th,

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- 1868, for a device for rocking or rolling the sickle-bar or finger-beam of a harvester, is novel, and is not anticipated by the patents granted to Dolph, Zug, Ball, Bartlett and Dodge, or Wemple. *Graham v. Gammon.* 7
49. The vibratable link in the Sprague mower is an infringement on the Graham patent, as it is an equivalent mode of producing the same result. *Id.* 7

GREEN—DRIVEN WELLS.

50. Reissued patent Number 4,372, granted to Nelson W. Green, for method of constructing artesian wells, dated May 9th, 1871, *held* valid. *Andrews v. Wright.* 329
51. The invention therein patented was novel. *Id.* 329
52. The invention was patentable and useful. *Id.* 329
53. The invention was not abandoned or dedicated to the public. *Andrews v. Carman*, wherein the same patent was sustained, cited and followed. *Id.* 329

GOODALE—MACHINERY FOR MAKING PAPER BAGS.

54. The first claim of the letters patent granted to William Goodale, July 12th, 1859, for improvements in machinery for making paper bags, and extended for seven years from July 12th, 1873, namely: "Making the cutter which cuts the paper from the roll or piece, of the form herein described, that in cutting off the paper, it also cuts it into the required form to fold into a bag, without further cutting," is valid. *Union Paper Bag Machine Co. v. Pulls & Walkley Co.* 403
55. The invention of Goodale was not simply a knife which would cut without waste, or which would produce the exact form of blank described in the specification, but was a machine having a cutter of five planes, which, by a transverse cut across a roll of paper in the flat sheet, cut the paper into the required form to fold into a paper bag without further cutting out, the form of the blank being substantially the form given in the specification. *Id.* 403
56. A machine having a knife of the irregular form of the Goodale cutter, which cuts the paper into the required form to fold into a bag, without further cutting out, is an infringement of the first claim of the Goodale patent, although such knife has an additional parallel blade at each end of it. *Id.* 403
57. Nor does the removal of the central cutting portion of such knife, about a bag's length in advance of the side cutters, cause the machine to be no infringement, the cutters which remove side pieces of paper from the roll remaining the same. *Id.* 403

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58. It required invention to make a knife which would cut from a roll of paper in the flat sheet, by one cut, a blank which could be folded into a bag without further cutting out. *Id.* 403

GUIDET—BELGIAN PAVEMENT.

59. Letters patent Number 58,407, dated October 2d, 1866, granted to Charles Guidet for Belgian pavement: *Held*, to be invalid for want of novelty. *Guidet v. City of Brooklyn.* 291

HAMILTON—SAW MILLS.

60. Letters patent No. 51,310, granted to Palmer Hamilton, December 5, 1865, for improvement in saw mills, *held* valid. *Hamilton v. Rollins.* 157

HASKELL—SEWING-MACHINES.

61. The invention described in letters patent No. 59,785, granted to David Haskell, August 28th, 1860, for an improvement in sewing-machines, which consisted in the combination of an isolated upright post and a notched movable plate, whereby flat and tubular work may be performed on the same machine: *Held*, to be the proper subject of a patent, and that the patent is valid. *Haskell v. Shoe Machinery Mfg. Co.* 553

HENRY—FIREARMS.

62. Letters patent No. 119,846, granted to Alexander Henry, October 10th, 1871, for improvements in firearms, *held* void. *Henry v. Providence Tool Co.* 501

HOLBECK & GOTTFRIED—PITCHING INSIDE OF BARRELS.

63. A simple, economical invention is not anticipated by a complex and expensive one. A stationary apparatus for surface-coating the interior of barrels, in which an air-blast is forced up through a grate fire, and the escaping gases and products of combustion discharged into the barrel to heat its surface, is not anticipated by a device wherein the air-blast circulates through heated pipes and passes thence into the barrel. *Gottfried v. Bartholomae.* 308
64. Letters patent No. 42,580, issued to John F. T. Holbeck and Matthew Gottfried, May 3d, 1864, for an improved mode of pitching barrels, *held* to be valid, and to be infringed by round, portable machines producing and applying a similar blast for a similar purpose. *Id.* 308

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HOWES—THROOP—BABCOCK—EWELL—GRAIN SEPARATORS
AND SCOURERS.

65. The reissued letters patent granted to Simeon Howes, Gardner E. Throop, Alpheus Babcock, Norman Babcock, and Carlos Ewell, March 5th, 1872, for an "improvement in grain separators and scourers," and extended for seven years from March 16th, 1872, the original patent having been granted to Howes and Throop, March 16th, 1858, are valid. *Howes v. McNeal.* 376
66. The first claim of said reissue, namely, "The combination with a suction fan, scouring mechanism, perforated inclosing shell, and outer tight casing, of a draught passage connecting the chamber outside of said perforated shell directly with the fan case, said passage being provided with auxiliary air inlets or openings, substantially as and for the purpose set forth," is infringed by a machine which embodies in combination all the elements which make up such claim, they being combined in substantially the same way and for the same purpose, and having the same combined mode of operation as in the patent, although in the infringing machine the direction of the current is at first reversed, and the refuse is carried through an opening in the inner wall, and then through an auxiliary fan into another upward passage, to reach the main fan, instead of, as in the patent, being at first carried directly upward through the draught passage, to reach the main fan, and although in the infringing machine, the increased supply of air is brought into the inside of the scourer, and through the perforations into the annular space between the scourer and the outer casing, instead of, as in the patent, coming through auxiliary air inlets in the bottom of the outer casing. *Id.* 376
67. The second claim of said reissue, namely, "In a combined scourer and grain separator, the arrangement of two wind trunks side by side, in the manner shown and described, and for the purpose herein set forth," is valid, although each of its two separators is, in and by itself, like a separator in a prior machine. *Id.* 376

HULL—LATHE.

68. The invention of L. Hull of a lathe (for which letters patent No. 53,003 were granted March 6th, 1866, and reissued August 15, 1876; No. 7,262), which consists chiefly in the combination of a holding and feeding mechanism with revolving cutters, having their axis of rotation at right angles, or nearly so, to the axis of the stock, and of guides for directing and controlling the action of the cutters, is valid, and is infringed by the use of a machine in which numerous blades are substituted for the burrs

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of the patentee, a formal change merely being made in the clamping and advancing mechanism by combining the two in one apparatus, instead of performing the operation by two separate devices. *American Whip Co. v. Lombard.*

598

HURCOMBE—MACHINE FOR FIXING RINGS TO UMBRELLA-CASES.

69. Letters patent Number 149,480, dated April 7th, 1874, granted to John C. Hurcombe, for an improvement in machines for fixing metallic rings to umbrella-cases, held to be valid. *Odiorne v. Denney.*

287

ISAACS—RAILWAY-TRACK BROOM.

70. Letters patent No. 180 717, granted to Marcus C. Isaacs, August 8th, 1876, for an improvement in railway-track brooms, held valid. *Isaacs v. Abrams.*

616

JENKINS—SELF-CLOSING FAUCET.

71. The patent for a self-closing faucet, granted to Nathaniel Jenkins, June 27th, 1865, was not anticipated by the French patent of Chretien Morand, dated November 14th, 1851. *Zane v. Peck.*

36

JOHNSON & SANDFORD—FASTENING SHEET METAL TO ROOFS.

72. The second claim of the reissued letters patent granted to Asa Johnson and Thomas S. Sandford, April 16th, 1872, for "an improvement in fastening sheet metal to roofs," namely, "In combination with the adjusting bolt and slotted side plates, suitably connected to, and combined with, the materials to be fastened together, for the purpose of accommodating the expansion and contraction of such materials with reference to each other, substantially as specified," is invalid, because the essential elements of the combination claimed are different from the essential elements described in the original patent, and the result produced by the combination described in the reissue is different from that produced by the combination described in the original patent. *Johnson v. Flushing and North Side R. R. Co.*

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73. The cases of *Gill v. Wells* (22 Wall., 1) and *Herring v. Nelson* (14 Blatchf. C. C. R., 293), commented on. *Id.*

428

JONES—MACHINERY FOR GRADUATING CARPENTERS' SQUARES.

74. The 3d claim of reissued letters patent No. 5,408, granted to plaintiffs as assignees of Horace K. Jones, May 13th, 1873, for improve-

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- ments in machinery for graduating carpenters' squares, which claim is for "the construction of the tool and socket so that the edge of the tool fits into a V-shaped recess, the angle of which is in line with the working-point of the tool, substantially as and for the purpose herein described;" *held*, not to be anticipated by prior patents in which the V-shaped grooves were not so arranged as to take hold of the cutting edge of the tool, as it is essential to the claim that the angle of the V be in line with the working-point of the tool. *Hart, Bliven & Mead Mfg. Co. v. Sargeant.* 263
75. Nor is the 6th claim of said patent, which is for "the clamping device for holding squares of varying tapers to be graduated, consisting of the fixed jaw P, the rocking adjustable jaw M, and the cam N, in combination, substantially as described," anticipated by prior patents for improved hand-vises which have no relevancy to a clamp which shall uniformly hold in proper position an article to be graduated by machinery. *Id.* 263
76. The gist of the 5th claim of the said patent, "In a machine for cutting graduations on squares, etc., the combination of the gravers I and their holders H with cams G and springs d, for throwing the gravers out of action at predetermined periods of time during the stroke of the same to cut graduation-marks of varying lengths, substantially as described," is the "flying-cut" as it is termed in the specification, and is infringed by a machine in which there is but one graver, and in which the square is moved along by an intermittent feed, the mode of operation by which the cutting of the graduating marks is effected being the same in both machines. *Id.* 263
77. *Held*, also, that this claim was not anticipated by a machine not having the "flying-cut." *Id.* 263

KEENE—CARRIAGE-STEPS.

78. An invention for covering the tread of a carriage-step with a vulcanized rubber clothing having an undulating surface was not anticipated by the use of rubber as a soling to stirrups, or as shoe-soles; neither was it anticipated by the use of iron treads, with channels running to the margin, for door-steps and stairs, or for carriage-steps. *Rubber Step Mfg. Co. v. Metropolitan R. R. Co.* 252

KELLEHER—RANDLETT—BOOT-PACKS.

79. The fourth claim of reissued patent No. 6,098, granted to P. Kelleher and J. C. Randlett, dated October 27th, 1874, for moccasin boot-packs, held void, as claiming new matter. *Kelleher v. Darling.* 438

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80. The first, second, and third claims of said patent held valid, and infringed by the defendants. *Id.* 438
81. The reissued patent No. 6,099, granted to P. Kelleher and J. C. Randlett, dated October 27th, 1874, for moccasin shoe-packs, held valid, and infringed by the defendants. *Id.* 438

KETCHUM—GRAIN AND GRASS CUTTING MACHINES—HARVESTERS.

82. The reissued patents, viz. : one dated July 25, 1871, Number 4,484, granted to W. F. Ketchum, for "improvement in single-wheel grain and grass cutting machines," and two dated December 12, 1871, numbered respectively 4,672 and 4,673, granted to W. F. Ketchum for "improvements in attachments for harvesters," held, to be valid. *Ketchum Harvesting Machine Co. v. Johnston Harvester Co.* 139

KLEIN—DIES.

- 83 Reissued letters patent No. 6,951, granted to J. C. Klein, February 29th, 1876, held valid. *Klein v. Park.* 145
84. The differences between the defendants' dies and those of the complainant are merely formal, defendants having substituted two dies at the sides, which are the equivalents of the side walls of the complainant's dies. *Id.* 145

MCGREGOR—VOLL—SASH FASTENER.

85. The claim of the reissued letters patent, granted October 11th, 1875, to the Hopkins & Dickinson Manufacturing Company, as assignees of George McGregor and George Voll, for an "improved sash-lock or sash-fastener" (the original patent having been granted to said Voll and McGregor, as inventors, March 30th, 1869), namely, "A vibrating lever, provided with a bolt, in combination with a striking-plate or hook, and with a catch-segment behind which the bolt can pass, formed upon the plate upon which the lever is pivoted, the whole constituting a sash-fastener, and the parts enumerated in the claim being and operating substantially as specified" does not include a vertically moving bolt in combination with a socket upon the base-plate. *Hopkins & Dickinson Mfg. Co. v. Corbin.* 199

MANN—SIEVES.

86. The improvement in sieves for which Letters Patent No. 106,597 were granted to Robert J. Mann, August 23, 1870, and of which the complainant is the owner, being construed by the court to consist in a combination of the hoop and sieve cloth, when the

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edge of the sieve cloth is clasped in the hoop and there fastened by *swaging*: *Held*, that the patent is not infringed by making a wire sieve connected with the rim, which is fastened by what is known as *double-seaming*, inasmuch as double-seaming is a mode of fastening known long before the date of the patent. *Adams & Westlake Mfg. Co. v. St. Louis Wire Goods Co.*

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87. The design patent No. 4637, granted to Robert J. Mañn, February 7th, 1871, for a flaring rim for sieves, whereby they will nest together, possesses no novelty, even if it were a design which would properly come within the patent law. *Id.*

77

MERRIAM—WHIP SOCKETS.

88. The complainant's patent, for a combination, with whip-sockets, of the particular means described for attaching them to carriages—the device used being a clamp, one arm of which is formed of projections on the side of the socket, and the other of a lever of the third order, both curved to fit the dash-rail of a carriage, and so constructed that it will fasten to the rail without reaching round it, and is worked by a screw and nut, is not infringed by the use of a socket, with a clamp extending around the rail made up of projections from the socket, a bar to go behind the dash-rail, and two screws with nuts, one on each side of the rail. *Merriam v. Van Nest.*

209

89. It is not infringed by the use of a socket with a clamp extending around the rail, made up of projections from the socket, a bar to go behind the rail, and a bar hinged to a projection at one side of the rail. *Id.*

209

MILLER—AMBROSE—LAMP.

90. The second claim of the reissued letters patent granted to E. Miller & Co., as assignees of Joshua E. Ambrose, January 11th, 1876, for an "improvement in lamps" (the original patent having been granted October 16th, 1860, and reissued May 20th, 1873, and, as so reissued, extended for 7 years from October 16th, 1874), namely, "The combination, in a lamp-burner, of the following elements: first, a deflector; second, a perforated air-distributor, which, with the deflector, forms the combustion-chamber; third, a wick-tube, extending from the fount to the combustion-chamber; fourth, a tube or passage to conduct the gas from the fount to said combustion-chamber, substantially as described," is for a different invention from any which was described and claimed in the original patent, and is invalid. *Miller v. Bridgeport Brass Co.*

20

Particular Patents.

MOORE—SEED DRILLS.

91. The second claim of the letters patent granted to Hiram Moore, November 20, 1860, for improvements in seed-drills, was for the combination of the separate bearings of a cylinder for distributing the seed, with a single shaft-bearing in the cylinder, shorter than the cylinder and larger than the shaft. In the defendants' machine the seed was distributed by a revolving wheel or disc with flanges upon the periphery : *Held*, upon the construction of the patent given by the court, that the claim must be limited to that class of machines having cylinders, and does not include those with flanged discs or wheels, and that consequently there was no infringement. *Moore v. Thomas.* 13
92. The third claim of the patent was for "a distributing cylinder for seeding-machines, having a bevelled bearing substantially in the manner and for the purposes specified" : *Held*, that as, upon the construction given to the patent by the court, and upon the evidence, it appeared that the object of the bevel in complainant's patent was to prevent dust and other obstructions from entering the bearings, and that the construction of defendants' seed-wheel was such that there was no liability of such obstructions entering the bearings, and further, that if there was any bevel in the defendants' machine more than was incident to the moulding of it, it was so slight as to bear no part in the operation of the machine, such bevel did not constitute an infringement. *Id.* 13
93. The sixth claim of the patent issued in 1861, to the same patentee, was for the combination of a removable driving-shaft, with a series of seeding-cylinders having independent bearings, whereby said shaft could at pleasure be removed to allow any of said cylinders to be taken out for repairs, without displacing the rest : *Held*, that this claim was merely for a multiplication or aggregation of the seeding-cylinders described in the first patent, and was not patentable. *Id.* 13

NIMMO—MOULDING CRUCIBLES.

94. Reissued letters patent No. 6,166, granted to complainants, assignees of George Nimmo, December 8th, 1874, for an improvement in moulding crucibles, *held void.* *Pickering v. McCullough.* 279

NISHWITZ—HARVESTER.

95. The first and second claims of reissued letters patent Number 3,372, granted to Frederick Nishwitz, April 13th, 1869 (original patent dated February 10th, 1858), for improvement in harvesters, *held valid.* *Sprague v. Adriance.* 124

Particular Patents.

NÖBEL—NITRO-GLYCERINE.

96. The reissued letters patent No. 5,799, for a compound of nitro-glycerine with an absorbent substance, preferably infusorial earth, are infringed by the use of a mealed powder composed of nitrate of soda, charcoal, and sulphur. *Atlantic Giant Powder Co. v. Good-year.* 161
97. The term "inexplosive," in the original patent, was properly omitted in the reissue as being ambiguous and meaning only comparatively inexplosive, or explosive under certain conditions; and such omission, reference being had to the terms of the original specification, did not enlarge the scope of the invention. *Id.* 161

NORTEMANN—CHAIN LINKS.

98. Letters patent No. 193,543, for "an improvement in ornamental chain links," the claims of which are: "1. The combination, in a box-chain link, of the independent perforated and externally-plated sides, A, having mitred edges, and soldered together at said edges or from the inner side of the link, substantially as specified," and "2. The combination of the perforated sides A, having plated exterior surfaces, and mitred joints at their edges, united internally by solder s, and the end rings, B, entered and soldered within the open ends of the box-link formed by the sides A, essentially as described," *held valid. Simmons v. Blackinton.* 481
99. Such invention is limited to links made of *plated metal*, and is not anticipated by a *solid* gold link with open sides, and mitred together at the corners of the blanks or pieces of which it is composed; nor by a link made of plated material, but so constructed that the material must be plated on both sides, and, therefore, without the advantages pointed out in the patent, of saving the more precious material obtained by the process of rolling the gold or silver upon one side only of the strip of inferior metal. *Id.* 481

PEDRICK—CUNNINGHAM—BENZOLE VAPOR APPARATUS.

100. The fourth claim of letters patent No. 12,535, granted to John C. Pedrick, assignor of Charles Cunningham, March 13, 1855, for benzole vapor apparatus, *held valid. Munson v. Gilbert & Barker Mfg. Co.* 595

PERRY—DICKEY—WILLIAMS—DESIGN FOR STOVES.

101. Design patent No. 7,456, granted to John S. Perry, Andrew Dickey, and Absalom C. Williams, May 26th, 1874, for a design for stoves: *held valid. Perry v. Starrett.* 485

Particular Patents.

PHILLIPS—PAVEMENT.

102. The wooden pavement patented to Robert C. Phillips is infringed by the use of blocks cut from trees or saplings in their natural form, though a narrow segment is cut off from one side of each block. *Phillips v. City of Detroit.* 150

ROGERS—TABLE BEVERAGES.

103. The letters patent granted to James J. Rogers, July 10th, 1877, for an "improvement in table beverages," the claim of which is, "The composition, as a table beverage, consisting of water, sugar, oil of wintergreen, alcohol, yeast and burnt sugar, in the proportions substantially as described," are valid. *Rogers v. Ennis.* 366
104. The letters patent granted to James J. Rogers, December 25th, 1877, for an "improvement in birch beer," the claim of which is: "The improved material herein described for producing beer called birch beer, and consisting of water, sugar, oil of birch, alcohol, home-made yeast, and burnt sugar, in the proportions substantially as specified," are valid. *Id.* 366
105. The inventions are new and useful compositions of matter. *Id.* 366

ROULSTONE—CORNER CLAMP FOR TRUNKS.

106. The reissued patent No. 7,149, dated May 30th, 1876, for improvement in corner-clamps or protectors for trunks, granted to complainants, the original letters patent having been granted to Edward A. G. Roulstone, *held* invalid for want of novelty. *Gould v. Ballard.* 324

SCOTT—WHIP SOCKETS.

107. The reissued letters patent No. 5,400, dated May 6th, 1873, granted to the complainants for "improvements in whip-sockets for carriages," *held* to be valid, and that the defendants have infringed the same. *Searles v. Van Nest.* 121
108. The reissue is for the same invention described in the original patent. *Id.* 121

SMITH—DIES FOR CHORD-BAR HEADS.

109. Letters patent No. 101,529, issued to Frederick J. Smith, April 5th, 1870, for an improvement in dies for making chord-bar heads, *held* void for want of novelty. *Smith v. American Bridge Co.* 565

Particular Patents.

SNOW—MACHINE FOR UNITING PAPER AND CLOTH.

110. The invention claimed in letters patent issued to George K. Snow, December 17th, 1872, numbered 134,105, for machine for uniting paper and cloth: *Held*, not invalid for want of novelty. *Snow v. Tapley.* 228

STOW—DE GOLYER—PAVEMENTS.

111. A patent for a method of spacing blocks in laying a patented pavement, by use of a removable strip or board of the thickness of the required spaces, against which the blocks were set, and which board, after they were set, was removed so as to leave a space the required distance between the rows or tiers of blocks, is not a patentable improvement in view of the state of the art generally, and particularly that joiners who set picket fences have previously been accustomed to use a picket or spacing-board to measure the spaces between the pickets, and against which he sets and nails each picket. *Stow v. City of Chicago.* 83
112. The inventions claimed in the following patents, namely: a reissued patent, dated January 19th, 1869, Number 3,274, granted to complainant for an improved pavement; a patent, dated February 25th, 1868, Number 74,862, granted to complainant for an improved street pavement; a patent, dated April 6th, 1869, Number 88,765, granted to D. L. De Golyer for an improvement in laying down block pavement; and a patent, dated December 31st, 1872, Number 134,404, granted to complainant for an improvement in wood pavement, *held* to have been anticipated. *Id.* 83

TARR—WONSON—PAINT.

113. The validity of Division B of reissued patent Number 4,599, dated October 17th, 1871, granted to James G. Tarr and Augustus H. Wonson, reaffirmed. *Tarr v. Folsom & Bann. & Ard.*, 24, followed. *Wonson v. Peterson.* 249
114. Doubts expressed as to the validity of Division A of the said reissued patent. *Id.* 249
115. The defendants held to infringe Division B of complainant's patent by the use of sulphuret of antimony in combination with oxide of copper and a suitable vehicle or medium, notwithstanding that, to the oxide of copper is added a small quantity of arsenite of copper or arsenate of copper, or both, it appearing that sulphuret of antimony is an earthy or mineral matter, which dissolves in water more slowly than the oxide of copper. *Id.* 249

Parties—Patent Office Model.

TERRY—CLOCK ESCAPEMENTS.

116. The patent granted to Silas B. Terry, assignor of the complainant, dated December 1st, 1868, for a new manner of constructing the pallets of clock-escapements, construed by the court, and upon the construction given, *held*, that the patent is broader than the invention, and that the invention as claimed has been anticipated. *Terry Clock Co. v. New Haven Clock Co.* 332

TURRELL—SKATES.

117. Reissued letters patent No. 7,151, granted to G. B. Turrell, assignee, May 30th, 1876, for improvement in skates, *held* valid. *Turrell v. Spaeth.* 458

WARNER—HUBS FOR VEHICLES.

118. The reissued patent No. 5,366, granted to complainants April 22d, 1873, for improvement in hubs for vehicles (the original letters patent, numbered 61,900, having been granted to Alma Warner, February 5th, 1867), *held* to be valid, and the invention therein claimed to be patentable, and that said reissued patent is infringed by the defendants. *Hall v. Jones.* 455

WILLIAMS—LOCOMOTIVE LAMPS.

119. The reissued letters patent granted to Irvin A. Williams, December 19th, 1865, for an "improvement in locomotive lamps" (the original patent having been granted to him April 29th, 1862), are valid. *Williams v. Rome, Watertown & Ogdensburgh R. R. Co.* 413.
 120. The claims of said reissue are for patentable combinations and not for aggregations. *Id.* 413;
 121. The present case distinguished from *Hailes v. Van Wormer*, 20 Wallace, 353, and *Reckendorfer v. Faber*, 2 Otto, 347. *Id.* 413.
 122. The question of infringement considered. *Id.* 413

PARTIES.

See CROSS-BILL, 2.

PATENT OFFICE MODEL.

1. Where the question of the validity of the reissue is before the court as a matter of construction of the original and reissued patent, it is allowable to produce the Patent Office model filed with the application.
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 Patent Rights—Patentability.

cation for the original, to aid in determining what was described in such original patent. *Reissner v. Anness.* 176

See APPLICATION, I.

PATENT RIGHTS.

1. Inventions secured by letters patent are property in the holder of the patent, and, as such, are as much entitled to protection as any other species of property consisting of a franchise, during the term for which the franchise or exclusive right is granted. *Star Salt Caster Co. v. Crossman.* 281
2. The owner of a patent may sell, assign, lease or give away such property; or enter into any arrangement or agreement respecting the same, not enlarging the right granted, as he might with any other personal property. *Id.* 281

PATENTABILITY.

1. The complainant's invention consisted in reversing the motion of the beater-bars for regulating the feed in a corn-sheller, and by this change produced a result which had not before been attained: *Held*, that the invention was patentable. *Adams v. Follet Mfg. Co.* 1
2. Where an anticipating device has been changed, so that by the change the thing which is produced is practically a new structure, the new device, though subsidiary to the former one, is patentable. *Zane v. Peck.* 36
3. Whether the sharpening of wooden blocks and setting them together and driving them down so as to make a solid foundation for a pavement is a patentable invention, when it appeared that cobble stones had previously been used with their sharp or smaller ends downwards for the same purposes, in substantially the same way, *quare.* *Stow v. City of Chicago.* 83
4. It is not a patentable invention, in view of the state of the art, to substitute wooden blocks for stone which had theretofore been used. *Id.* 83
5. A prior inventor having patented improvements in pavements, consisting of an improved foundation made of a board covering, laid on the old sand or earthy foundation, with a superstructure of alternate rows of vertical blocks and compacted filling, laid transversely or across the roadway, it is not, in view of this state of the art, invention, to leave out the improved foundation, and use an old foundation with the other parts of the pavement. *Id.* 83

Patentability.

6. A reconstruction of a machine, so that a less number of parts will perform all of the functions of the greater, may be invention of a high order, but the omission of a part, with a corresponding omission in function, so that the retained parts do just what they did before the patented invention, is not patentable. *Id.* 83
7. An imperfect and incomplete invention, resting in mere theory, or in intellectual notion, or in uncertain experiments, and not actually reduced to practice and embodied in some distinct machinery, apparatus, manufacture, or composition of matter, is not patentable. *Draper v. Potomska Mills Corporation.* 214
8. It is patentable invention, where, by the coaction of the elementary parts of a combination, a new and practical result has been attained, which was not reached by their separate action before the combination was made. *Kerosene Lamp Heater Co. v. Littell.* 312
9. Where a patentee claimed : " The covering of a base-ball consisting of an outer and an inner covering, each of which is composed of two pieces of leather, and applied to the ball independently of each other, substantially as and for the purpose specified : " *Held*, that although the patentee was the first to combine the double leather cover (which was well known on certain kinds of balls), and apply it to a ball of a harder kind equally well known, but which before had been used with a single leather cover or with none, the change would not constitute a patentable invention. *Mahn v. Harwood.* 515
10. A claim in a patent for a bronze dressing for leather, as a new article of manufacture, composed of spirit-varnish and aniline fuchsine, with or without the addition of aniline blue or bronze-powder, as set forth and described, *held*, to be for a patentable invention. *Cahill v. Brown.* 580
11. Such invention is not anticipated by a prior provisional English specification, which relates to a method of dyeing or staining woven fabrics or paper, and for coloring the surface of glass previously coated with pyroxyline by the application of a solution of the desired color to the previously prepared surface. *Id.* 580
12. Nor by a prior patent for a peculiar mode of coloring and bronzing leather cloths, which consists in applying to such cloths, when properly prepared, certain well-known coloring matters composed of solutions of various aniline colors, and then burnishing the surface. *Id.* 580
13. A change in the form of a machine or instrument, though slight, if it works a successful result, not before accomplished in a simi-

 Patented Article—Patented Improvement.

lar way, in the art to which it is applied or in any other, is patentable, *Isaacs v. Abrams*. 616

See ANTICIPATION, 1, 2; DESIGN PATENT, 1; EVIDENCE, 8; INFRINGEMENT, 11; INJUNCTION, 17; INVENTION, 1, 2; PARTICULAR PATENTS, 36, 38, 61, 93, 104, 111.

PATENTED ARTICLE.

1. If a sewing-machine has acquired a name which designates a mechanism or a peculiar construction, parts of which are protected by patents, other persons, after the expiration of the patents, have the right to construct the machine and call it by that name, because that merely expresses the kind and quality of the machine. *Singer Mfg. Co. v. Larsen*. 246
2. Although a person not connected with the Singer Manufacturing Company would have the right, after the patents have expired, to make a Singer sewing-machine and call it by that name, still, he would not be permitted to do any act, the necessary effect of which would be to intimate, or make any one believe, that the machine which he constructs and sells is manufactured by that company. *Id.* 246
3. When the proprietor of a patented article sells it for the purpose of allowing it to be used in the ordinary pursuits of life, and to pass into the market of the country as an ordinary article of commerce, and subject to unrestricted purchase and sale, he waives his right to affix conditions or restrictions to its use and sale, and consents that, after one sale and the payment of one royalty, it shall pass out of the limits of the monopoly. *Hawley v. Mitchell* distinguished. *American Cotton Tie Co. v. Simmons*. 320
4. Complainants sold patented buckles for use, in connection with an iron strap, for a tie or fastening to cotton bales. The buckles had printed on them the words "licensed for one use only," and on the bill-head was a notice, either to the same effect, and that they were sold and purchased subject to the restriction, or, that the buckles were the property of the complainants, who reserved the right after such use to recover possession of them wherever found: *Held*, that the purchasers took an unrestricted title to the buckles without any reservation in the vendors, and that the case fell within the principles laid down in *Goodyear v. Beverly Rubber Co.*, 1 Cliff, 348, and *Washing Machine Co. v. Earle*, 3 Wall., Jr., 320. *Id.* 320

PATENTED IMPROVEMENT.

See INFRINGEMENT, 7, 10; INFRINGER, 3; PARTICULAR PATENTS, 111; PATENTABILITY, 2; PROFITS AND DAMAGES, 6, 7, 8, 10, 13; SCOPE OF PATENT, 2, 3.

Penalty—Practice.

PENALTY.

See PLEADING, 1,

PLEA.

See PLEADING, 3; PRACTICE, 9, 10.

PLEADING.

1. The action was brought to recover a penalty under section 4901 of the Revised Statutes, for marking certain sacks of unpatented flour with the word "patent." The defendants demurred to the complaint, upon the ground that it did not state facts sufficient to constitute a cause of action: *Held*, that the allegation in the complaint "that all of said flour and sacks were the property of the defendant, and patentable under the laws of the United States," was a sufficient allegation that the flour marked was patentable, and that it was not a sham allegation, as flour may be a patentable article. *Oliphant v. Salem Flouring Mills Co.* 256
2. The manner of pleading and proving special defences in suits for infringement, discussed. *Kelleker v. Darling.* 438
3. Where one of the defendants appeared, and pleaded certain facts, which, if true, would show that he had no interest in the subject matter of the suit, and a motion was made to strike out such plea, which motion was, by consent, treated as a demurrer: *Held*, that the plea should not be overruled, nor ordered to stand as an answer, but that the benefit of the plea should be saved to the defendant until the hearing, when it would be treated as the testimony in the case might warrant. *Williams v. Empire Transportation Co.* 533

See DECREE, 1; DEFENCE, 2, 3, 4, 5, 6; DEMURRER, 1; EVIDENCE, 3.

POWER OF ATTORNEY.

See ATTORNEY IN FACT, 1.

PRACTICE.

1. Section 5 of the Judiciary Act of Congress of March 3d, 1793 (1 U. S. Stat. at Large, 334-5), requiring previous notice to the adverse party of the time and place of moving for an injunction, was

Practice.

- repealed by section 5596 of the Revised Statutes. *Yuengling v. Johnson.* 99
2. *It seems*, that section 5 of the Judiciary Act of March 3d, 1793, so far as requiring previous notice, had been previously repealed by the Act of June 1st, 1872 (17 U. S. Stat. at Large, 197). *Id.* 99
 3. *It seems*, also, that section 5 of the Judiciary Act of March 3d, 1793, so far as requiring previous notice of application for injunctions in patent cases, had been previously repealed by the Act of July 8th, 1870 (16 U. S. Stat. at Large, 206). *Id.* 99
 4. A bill filed under section 4915 of the Revised Statutes is an original and not an appellate proceeding; and in such a proceeding it is proper to take the testimony before an examiner. *In re Squire.* 133
 5. The practice, in such a proceeding, is governed according to equity rules, and the party contesting the petitioner's right to a patent cannot confine him to matters existing of record in the Patent Office, or in the Supreme Court of the District of Columbia. *Id.* 133
 6. Section 4915 of the Revised Statutes must be construed to mean that when an application is refused by the Commissioner (as in cases of interferences), or by the Supreme Court of the District of Columbia (as in other cases), the applicant may have remedy by bill in equity. *Id.* 133
 7. Such a case having been presented by a bill in equity and notice given, as prescribed, the subsequent proceedings must be such as pertain to equity causes. *Id.* 133
 8. The court will receive all the proceedings had before the Patent Office, and, when an appeal lies to the Supreme Court of the District of Columbia, all the proceedings had before that court, together with all new and additional testimony taken in the equity proceedings. *Id.* 133
 9. The defendants, in answer to a bill for infringement, filed a plea containing three distinct points of defence. The matters pleaded all related to the invalidity of the complainants' patent, but alleged separate and distinct grounds for such invalidity: *Held*, that where more than one point of defence is relied on, such points should be stated by way of answer and not of plea, the latter being in such case, bad for duplicity. *Reissner v. Anness.* 148
 10. A plea may contain an averment of several facts, but they must all conduce to a single point of defence. The practice is, not to confine the defendant to his first ground of defence by striking out the others, but to allow him either to set down the pleas as an answer, or to put him to his election as to which of the pleas he will abide by. *Id.* 148
 11. In a suit in equity, the proofs taken on the part of the defendant

Presumption.

- were not filed, because the examiner's fees had not been paid. The plaintiff moved for an order that such proofs be filed, and that an attachment issue against the defendant to compel payment of such fees : *Held*, that the motion must be denied. *Frese v. Biedenfeld*. 205
12. A prior patent, of which no notice has been given, will not be considered as bearing on the question of novelty. *Odiome v. Denney*. 287
13. In the proofs, W. gave evidence as to prior knowledge and use by him of the thing patented. His name and such fact were not set up in the answer. On the taking of the proofs, the plaintiff objected to such evidence of W. "as incompetent under the rules of the Court" and as "incompetent under the laws and rules governing practice in the Circuit Courts of the United States." At the hearing, the plaintiff sought to exclude the evidence of W. because his name and the fact of his prior knowledge and use were not set up in the answer : *Held*, that the objection was waived because it was not distinctly made when the evidence was taken. *Barker v. Stowe*. 337
14. The plaintiff not allowed to give further evidence, there being no claim of a failure, through inadvertence, to give other or further evidence, or that there was any which could be given. *Garretson v. Clark*. 352
15. Costs awarded to the plaintiff, except the costs of the reference, and report, and exceptions, and the hearing thereon. *Id.* 352
16. Issues of fact in civil cases in the circuit courts may be tried and determined without a jury, whenever the parties or their attorneys of record file with the clerk a stipulation in writing, consenting to that mode of trial. *Judson v. Bradford*. 539
- See ABATEMENT, 1 ; COMPOSITION, 1 ; CROSS-BILL, 1, 2 ; EXCEPTIONS TO MASTER'S REPORT, 1 ; JURISDICTION, 2 ; PLEADING, 3 ; REVIVOR, 1, 2.

PRESUMPTION.

1. The presumption of law is always in favor of the validity of the reissue. *Reissner v. Anness*. 176
2. All matters of fact involved in the hearing of an application to reissue a patent, and in granting it, are conclusively settled by the decision of the Commissioner of Patents in granting the application. *Judson v. Bradford*. 539
3. A patent offered in evidence affords a *prima facie* presumption of its validity, but such presumption may be overcome by proof that the improvement was previously made and reduced to practice by another, in this country ; or that it had been previously known

Prior Knowledge—Prior Publications.

to and used by others here before it was invented by the plaintiff; or that it had been patented or described in some printed publication prior to the supposed invention by the patentee. *Id.* 539

4. Patents, in due form, when introduced in evidence in a suit for infringement, afford a *prima facie* presumption that the alleged inventor was the original and first inventor of what is therein described as his improvement. *Haskell v. Shoe Machinery Mfg. Co.* 553
5. Reissued patents are presumed to be for the same invention as the original, and will only be adjudged void, because for a different invention, where it clearly appears that the reissue contains some new feature, of a material character, not described, suggested, or substantially indicated in the specification, drawings or Patent Office model of the original. *Thomas v. Shoe Machinery Mfg. Co.* 557
6. Inventions secured by letters patent are presumed to be new and valid, until the contrary is shown. *Id.* 557

See ACQUIESCENCE, 2; APPLICATION, 1; BURDEN OF PROOF, 2, 5; DATE OF INVENTION, 3; EVIDENCE, 4, 6; INJUNCTION, 8, 9; RES ADJUDICATA, 1, 2.

PRIOR KNOWLEDGE.

1. Evidence of mere prior knowledge, without use, is not sufficient to defeat a patent *prima facie* valid; the invention must be shown to have been complete, and capable of working. *Judson v. Bradford.* 539

See PRACTICE, 13; PRIOR USE, 1, 2.

PRIOR PATENTS.

See PRIOR PUBLICATIONS.

PRIOR PUBLICATIONS.

1. The reason of the rule, that, where a patent or publication is introduced in evidence to show that the complainant's invention had been patented or described in some printed publication prior to the supposed invention or discovery by the complainant, the defendant will not be permitted to prove that the invention described in the alleged prior patent or printed publication was made prior to such patent or printed publication, explained. *Kelleher v. Darling.* 438
2. Where nothing is contained in the specifications of prior patents which would aid a mechanic to prepare the patented dressing, it

 Prior Use—Privity.

- follows that they are not of a character to anticipate the patent of the complainant. *Cahill v. Brown*. 580
3. Two prior patents which, taken together, would have made up the invention of the patentee, will not anticipate the patent, where neither of them alone shows the complete invention. *Munson v. Gilbert & Barker Mfg. Co.* 595
4. A patented invention cannot be superseded by the mere production of a British provisional specification, though of prior date, unless the description and drawings contain and exhibit a substantial representation of the patented improvement in such full, clear, and exact terms as to enable any person skilled in the art or science to which it appertains, to make, construct and practice the invention to the same practical extent as they would be enabled to do if the information was derived from a prior patent. *Goff v. Stafford*. 610
- See ANTICIPATION, 2, 3, 5, 9; EVIDENCE, 1; NOTICE, 1; PRACTICE, 12; PRESUMPTION, 3.

PRIOR USE.

1. The prior knowledge and use of the invention, by others, which will invalidate a patent, explained. *Bullock Printing Press Co. v. Jones*. 195
2. Section seven of the Patent Act of March 3d, 1839, as amendatory of that of July 4th, 1836, construed to imply that the purchase, sale, or prior use, etc. of an invention, in order to defeat a patent, shall have been with the knowledge and consent of the inventor. *Draper v. Wattles*. 618
3. The prior sale, purchase, or use of the thing patented, necessary to defeat the patent, discussed. *Id.* 618
4. Whether it is enough to prove that the inventor has sold an earlier and less perfect article, where the thing sold, although within the claim of the patent, is not the whole of the patented invention, *quare*. *Id.* 618
- See PRACTICE, 13; PRESUMPTION, 3; PRIOR KNOWLEDGE, 1.

PRIORITY.

See EVIDENCE, 6.

PRIVITY.

See CORPORATION, 1.

 Process—Profits and Damages.

PROCESS.

See INFRINGEMENT, 4 ; INJUNCTION, 18 ; NEW MATTER, 2 ;
PARTICULAR PATENTS, 25, 46 ; REISSUE, 5.

PRODUCT.

See INFRINGEMENT, 4 ; PARTICULAR PATENTS, 46 ; REISSUE, 5.

PROFITS AND DAMAGES.

1. A license fee, if established, is the measure of the injury fixed by the patentee himself, and, in that event, the only damages recoverable by reason of the infringement is the amount of the license fee for the number of infringing articles used. *Vaughan v. Central Pacific R. R. Co.* 27
2. In *Goulds Mfg. Co. v. Cowing* (12 Blatchf. C. C. R., 243), it was held, that the invention covered by the plaintiff's patent was of an improvement in a pump, and that, as the plaintiff had failed to show the profits or damages arising to the defendants from the use of such improvement, it was entitled to only nominal damages. On further evidence being given, showing that, after the plaintiff's pump had been introduced into certain oil regions, other pumps could not be sold in those regions : *Held*, that such further evidence did not show that the plaintiff was entitled to other than nominal damages. *Goulds Mfg. Co. v. Cowing.* 75
3. Where the profits made by a defendant from the unlawful use of a patented invention amount to more than the license fees for such use would amount to, the plaintiff, although exercising his monopoly by the granting of licenses, is entitled to recover such profits, on an accounting for profits, and is not limited to such license fees. *Wooster v. Taylor.* 241
4. Where a patentee claims, in a suit, damages for a reduction of his prices, caused by the defendant by infringing the patent, he must establish, by satisfactory evidence, not only that a reduction of his prices was caused by the infringement, but how much such reduction was, and how much of it was occasioned by the acts of the defendant, and how much was due to the fact that the infringing articles contained the invention patented. Such evidence must not be estimate, conjecture, and opinion, but must be such as to afford a sound and safe basis of calculation. *Ingersoll v. Musgrove.* 304
5. Where a patentee claims, as damages, a loss of profits caused by a loss of sales, resulting from an infringement, he must establish,

Profits and Damages.

- by satisfactory evidence, that he would have sold more of the patented articles than he did sell if the infringing articles had not been sold, and what profit he would have made on them, and what part of such profit is to be assigned to the invention patented. Such evidence must not be conjecture and speculation. *Id.* 304
6. In a suit in equity on two letters patent, each for an "improved mop-head," an interlocutory decree for profits and damages was made. The plaintiff, before the master, put in no evidence, except evidence to show the damages to the plaintiff and the profits to the defendant in the manufacture of the infringing mop as a whole. At the close of the plaintiff's evidence the defendant moved to dismiss the proceedings, on the ground that no basis had been laid before the master to compute or estimate the plaintiff's damages, and that he was entitled to only nominal damages. The point was reserved, and the defendant put in evidence on the basis assumed by the plaintiff. The master reported that, as no evidence had been given before him of damages resulting to the plaintiff, or of profits accruing to the defendant, from making and selling the patented improvements as distinguished from the whole mop, he found for the plaintiff nominal damages only: *Held*, that the master's report was correct. *Garretson v. Clark.* 352
7. The patentee must, in every case, give evidence tending to separate or apportion the defendant's profits and the patentee's damages, between the patented feature and the unpatented features, and such evidence must be reliable and tangible, and not conjectural or speculative; or he must show, by equally reliable and satisfactory evidence, that the profits and damages are to be calculated on the whole machine, for the reason that the entire value of the whole machine, as a marketable article, is properly and legally attributable to the patented feature. *Id.* 352
8. In the present case it was held, that the proper inquiry was, not what saving the defendant had made by using the patented device, over the saving which he might have made if he had used any or all of various other devices, but what saving he had made directly by using the patented device. *Herring v. Gage.* 396
9. Interest on the cost of a device, and the cost of power, are to be allowed as deductions from profits, only when it is shown they have been paid or incurred as debts. *Id.* 396
10. The claim of letters patent for an improvement in concrete pavements was, "The arrangement of tar paper, or its equivalent, between adjoining blocks of concrete, substantially as and for the purpose set forth." Under an interlocutory decree for an account of profits, the plaintiff did not prove before the master any license fee, as showing the value of the patented improvement, nor did

 Profits and Damages.

- he show such value otherwise. The reference and the master's report proceeded on the view that all the value in the infringing pavement was due to the patented improvement, and the master reported as profits the profits made by the defendant in laying the entire pavement: *Held*, that the master should have reported no profits. *Schillinger v. Gunther*. 491
11. Where the evidence with regard to license fee showed only a single license: *Held*, that, under the circumstances of this case, it could not be regarded as affording the only measure of compensation to which the plaintiff was entitled. *Judson v. Bradford*. 539
12. Gains and profits are the proper measure of damages in equity suits, except in certain cases where the injury sustained by the infringement is plainly greater than the aggregate of what was made by the infringer. *Brady v. Atlantic Works*. 577
13. Actual profits made by the infringement are the profits which the complainant is entitled to recover, excluding those made in the construction of such portions of the infringing machine as are not embodied in the patented mechanism. *Id.* 577
14. Where the defendant rendered before the master an account of the number of machines which he had made, some of which he represented as infringing three claims of the patent, and others only one claim, and complainant proved a royalty for the use of machines similar to those employed by the defendant, and defendant admitted in writing "the license and the terms of the same as alleged" by the complainant, and then offered to verify the statement of his account that a large part of his machines infringed only one of the three claims, and the master held this evidence to be inadmissible, and assessed the damages for all the machines at the usual rate, to which ruling the defendant excepted. *Held*, that such exception must be overruled. *Kendrick v. Emmons*. 623
15. Whether, where a royalty had been established, there can be, on an accounting, any legal ground for distinction between the damages to be recovered for the infringement of a greater or of a less number of claims of the patent, *quære*. *Id.* 623
16. In an accounting no part of the expenses of the litigation should be assessed as damages, nor is interest to be added to the profits, except under peculiar circumstances. *Holbrook v. Small*. 625
17. The power conferred upon a court of equity, by section 4921 of the Revised Statutes, to treble the damages in a suit for infringement, does not authorize the court to treble the amount of profits. *Id.* 625
- See ACCOUNT, 1; ACTION AT LAW, 1; EXCEPTIONS TO MASTER'S REPORT, 1; INFRINGEMENT, 11; INFRINGER, 2; INJUNCTION, 20; JOINT INFRINGERS, 1; MASTER'S REPORT, 1; REVIVOR, 2; SURVIVAL OF ACTION, 2; VIOLATION OF INJUNCTION, 3.

Public Use—Reissue.

PUBLIC USE.

1. The question, whether it is sufficient, in order to defeat the right of the applicant to a patent, to show that his inventions had been in public use or on sale more than two years prior to his application, without proving that it was with his consent and allowance, considered. *Kelleher v. Darling.* 438
2. The effect of the provisions of the 7th section of the Act of March 3d, 1839 (5 U. S. Stat. at Large, 354), is, to require that an inventor shall not permit his invention to be used in public at a period earlier than two years prior to his application for a patent, under the penalty of having his patent rendered void by such use. Consent and allowance by the inventor are not necessary to such invalidity. *Egbert v. Lippmann.* 468
3. The authorities upon the question of what constitutes public use, examined. *Henry v. Providence Tool Co.* 501
 See ACQUIESCENCE, 1, 2 ; BURDEN OF PROOF, 4 ; EXPERIMENTS, 1 ; FOREIGN PATENT, 1 ; NOTICE, 1.

PURCHASER.

See PATENTED ARTICLE, 3, 4.

RECORDING ASSIGNMENT.

1. There is no law which requires an assignment of a right of action under a patent to be recorded in the Patent Office. *Gear v. Fitch.* 573

REHEARING.

1. Under the circumstances of this case, the court refused to open an interlocutory decree. *Ingersoll v. Benham.* 179
2. The principles stated which govern the question whether a cause shall be reargued, after a decision. *Ready Roofing Co. v. Taylor.* 368
 See NEW TRIAL, 1, 2, 3.

REISSUE.

1. The combination contained in the second claim contains a lesser number of ingredients than the combination which composed the original invention, and the specification of the original patent did not suggest that a lamp containing the modified combination of

Reissue.

- the second claim of the reissued patent was feasible and within the scope of the invention, and, therefore, under the rule laid down in *Gill v. Wells* (22 Wall., 1), said second claim is void. *Miller v. Bridgeport Brass Co.* 20
2. A patent for a combination of old elements may be reissued for a combination of fewer elements than were contained in the combination originally claimed. The decision in *Gill v. Wells* (22 Wall., 1), explained. *Herring v. Nelson.* 55
 3. Where the Supreme Court declared certain patents void, for want of novelty, and they were afterwards reissued, and suit was brought for an infringement of the reissues: *Held*, that the reissues being for the same invention as were the original patents, they would be void for want of novelty upon the same grounds as the original patents. *Held*, also, that if it be admitted that there is something new and patentable in the reissues, which was not in the original, the reissued patents would be void because not for the same invention as the original patents. *Jones v. McMurray.* 130
 4. The purposes and scope of reissues considered. *Abbe v. Clark.* 211
 5. The right to reissue a patent in two divisions, one for the new process, and one for the new product, illustrated. *Badische Anilin and Soda Fabrik v. Hamilton Mfg. Co.* 235
 6. The action of the commissioner, in granting a reissue, conclusively settles the question that the original patent was inoperative or invalid by reason of a defective or insufficient specification, or by reason of the patentee claiming as his own invention more than he had a right to claim as new, and that the error arose by inadvertence, accident, or mistake, and without any fraudulent or deceptive intention. *Kerosene Lamp Heater Co. v. Littell.* 312
 7. The province and scope of reissues considered. *Id.* 312
 8. While enlargement by the use of new instrumentalities is forbidden in a reissue, restriction by the disuse of some of the old is allowable. *Carver v. Braintree Mfg. Co.* (2 Sto., 432); *Gallahue v. Butterfield* (6 Fish., 203); and *The Dorsey Harvester Revolving-Rake Co. v. Marsh* (6 Fish., 387), cited. *Gould v. Ballard.* 324
 9. Where the alteration in a reissue consists in the addition of a distinct invention, there ought to be found in the original specification enough to fairly apprise other inventors and the public that the original invention included and embodied such additional feature. *Kelleher v. Darling.* 435

See BURDEN OF PROOF, 2, 3; DEFENCE, 3; ESTOPPEL, 5, 6; EVIDENCE, 3; FRAUD, 1; LACHES, 1; NEW MATTER, 1, 2, 3, 4, 5; PARTICULAR PATENTS, 46, 72; PATENT OFFICE MODEL, 1; PRESUMPTION, 1, 2, 5; TERM OF PATENT, 1.

 Rejected Application—Royalty.

REJECTED APPLICATION.

1. A rejected application for a patent to one person is not of itself a bar to a patent to another. *Rubber Stop Mfg. Co. v. Metropolitan R. R. Co.* 252
See ANTICIPATION, 8; EVIDENCE, 1; PRACTICE, 5.

RES ADJUDICATA.

1. The decisions of the Supreme Court, upon questions of law, govern the decisions of the Circuit Courts, and upon questions of fact arising in the Supreme Court on the validity of a patent, the decision of that court is final so far as the facts were before it, and it is a fair presumption in such cases that all material facts were before it. *American Middlings Purifier Co. v. Christian.* 42
2. A decision of the Supreme Court, although not operating as an estoppel upon others not parties to the suit, is conclusive on a circuit court as to the principles which it decides, and raises a *prima facie* presumption of the validity of patents held valid by it, which requires clear and satisfactory proof to the contrary to rebut. *American Middlings Purifier Co. v. Atlantic Milling Co.* 168
3. A decree of a circuit court taken *pro confesso* will not preclude full inquiry and investigation by another court. *Everet v. Thatcher.* 435
See ESTOPPEL, 3; INJUNCTION, 3, 6, 15; PARTICULAR PATENTS, 28, 29.

RESULTS.

See ANTICIPATION, 2, 3, 5; CONSTRUCTION OF PATENTS, 5;
EQUIVALENTS, 1; PATENTABILITY, 1, 8, 13;

REVIVOR.

1. A suit in equity is not revived under Rule 56, unless an order to that effect be made. *Atterbury v. Gill.* 174
2. An interlocutory decree establishing the validity of complainant's patent and the infringement thereof was entered, and the case was referred to a master to ascertain the amount of the profits and damages for which the final decree should be passed; pending the reference the defendant died: *Held*, that the action survived, and that an order of revivor could properly be entered. *Id.* 174

ROYALTY.

See LICENSE FEE.

 Scope of Patent—Statute of Limitations.

SCOPE OF PATENT.

1. The scope of the patent is fixed by what was known at the date of the completed invention, and not by what was known at the time when the application was filed. *Sprague v. Adriance.* 124
2. Where a patented invention is merely a combination subordinate to pre-existing devices, and has been limited to such sub-combination by the language of the claim, the patentee cannot successfully insist that he is entitled to cover by such claim the pre-existing devices; and this is true where one of the joint inventors of the junior invention is also the inventor of the senior inventions. *Hopkins & Dickinson Mfg. Co. v. Corbin.* 199
3. Where a subsequent patent is merely for an improvement upon a previous one, both patents may be valid; but, if the second includes the first, it could not be used without the consent of the owner of the first, nor could the owner of the first patent use the second without the consent of its owner. *Star Salt Caster Co. v. Crossman.* 281

See CONSTRUCTION OF PATENTS, 3, 4; EQUIVALENTS, 1; PARTICULAR PATENTS, 91, 92, 93; REISSUE, 9.

SPECIFICATION.

1. The courts should not defeat a patent for a mere technical defect in description, if it clearly appears what the inventor has described and claimed as his invention. *Adams v. Joliet Mfg. Co.* 1

See CONSTRUCTION OF PATENTS, 2; DEFENCE, 3, 4; NEW MATTER, 2, 3; REISSUE, 9.

STATE COURTS.

See DEMURRER, 2.

STATE OF THE ART.

See SCOPE OF PATENT, 1.

STATUTE OF LIMITATIONS.

1. Although the original and extended term of the letters patent had expired before suit brought, yet the bill, being for a discovery and account, can be maintained. *Sayles v. Dubuque & Sioux City R. R. Co.* 219

Statutes of the U. S. Cited.

2. The right of the complainant to recover profits realized from the use of complainant's original patent, *held* barred by section 55 of the Act of 1870. (16 U. S. Stat. at Large, 206.) *Id.* 219

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1874. U. S. Revised Statutes, Sec. 4921. Jurisdiction of Circuit Courts in patent causes.	103
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SUBSTITUTION.

See DEFENCE, 2; EQUIVALENTS, 5; INFRINGEMENT, 14; PARTICULAR PATENTS, 84, 115.

SUIT IN EQUITY.

See DEMURRER, 2; ELECTION OF REMEDIES, 1; ESTOPPEL, 4; PRACTICE, 6, 7, 8; REVIVOR, 1; STATUTE OF LIMITATIONS, 1; SURVIVAL OF ACTION, 1.

SUPPLEMENTAL BILL.

See ABATEMENT, 1.

SUPREME COURT.

See RES ADJUDICATA; INJUNCTION, 15; PARTICULAR PATENTS, 29.

SURVIVAL OF ACTION.

1. Proceedings in equity for infringement of patents are not strictly proceedings for torts, and upon the death of the respondent the action survives. *Atterbury v. Gill.* 174
- See REVIVOR, 2.

TERM OF PATENT.

1. The provision of the statute (Act of 1870, § 25), providing that, in case of a foreign patent, the United States patent shall expire at the same time with the foreign patent, is not retroactive in its operation, and does not apply to American patents granted before the law took effect, or to the reissues of such patents granted after

Title—Use.

- the law took effect. *Badische Anilin and Soda Fabrik v. Hamilton Mfg. Co.* 235
2. The 25th section of the Patent Act of 1870, construed to mean that a patent granted in the United States will expire at the same time as the original term of a foreign patent for the same invention ; or, if there be more than one, at the same time as the one having the shortest term, without regard to any prolongation of such foreign patent which the patentee might procure from the foreign government. *Henry v. Providence Tool Co.* 501
3. The provision of the act of July 8th, 1870, that patents taken out in the United States for inventions previously patented in a foreign country shall expire at the same time with the foreign patent, or, if there be more than one, at the same time with the one having the shortest term, but in no case shall it be in force more than seventeen years, does not apply to letters patent of the United States granted previous to such enactment. The cases of *Weston v. White* and *Badische Anilin and Soda Fabrik v. Hamilton Manufacturing Co.*, cited. *Goff v. Stafford.* 610

TITLE.

1. Where the complainant derives his title from an administrator : *Held*, that such title was proved by evidence of the signature of the administrator, and of the fact that the consideration for the assignment was paid to him, and by copies from the records of the probate court showing that such assignor was in fact the administrator of the deceased owner of the patent. *Gear v. Fitch.* 573

See CROSS-BILL, 1 ; TRUSTEE, 1.

TORT.

See DAMAGES, 1 ; SURVIVAL OF ACTION, 1.

TRUSTEE.

1. In a court of equity a party holding an equitable title cannot be ousted of his equitable rights by the holder of the legal title, who in such case stands in a court of equity as trustee for the use of the party beneficially interested. *Whiting v. Graves.* 222

See EQUITABLE JURISDICTION, 1 ; INFRINGER, 1.

USE.

See PATENTED ARTICLE, 3, 4.

Utility--Waiver.

UTILITY.

1. The necessary utility, to uphold a patent, considered. *De Florez v. Raynolds.* 293
2. Where a patented invention possesses peculiar advantages, derived from the mode of construction, which are not found in prior devices of generally a similar character, there is sufficient utility to support the patent. *Simmons v. Blackinton.* 481

See INFRINGEMENT, II.

VIOLATION OF INJUNCTION.

1. It is no excuse for the violation of a preliminary injunction in a patent case, that the patent is invalid, or the writ improvidently granted. If the court has jurisdiction to issue the writ, it must be obeyed until it is dissolved. *Phillips v. City of Detroit.* 150
2. Where a preliminary injunction in a patent case is violated, the defendants will not be required to pay the patentee the amount of his royalty, where they were acting in an official capacity, deriving no personal benefit from the infringement, and especially if there be reason to believe they acted in good faith. *Id.* 150
3. A violation of an injunction in a suit on letters patent not having been wilful, and a motion for an attachment for contempt for such violation having been made, with a view to determine whether the method used by the defendant was an infringement of the patent, the court, in adjudging the defendant guilty of such contempt, ordered that he pay to the plaintiff the profits and damages on account of the violation of the injunction, and the costs of the proceeding. *Ready Roofing Co. v. Taylor.* 368

WAIVER.

See PATENTED ARTICLE, 3; PRACTICE, 13.

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